

How Do I Know Thee? Let Me Count the Ways: Meditation and Basic Cognitive Processes

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ONE OF THE BEST KEPT SECRETS of the last several centuries may be that the study of religious experience conceived broadly can have something fundamental to contribute to scientific psychology. One hundred years ago William James suggested this radical idea in his classic *The Varieties of Religious Experience*, yet today mainstream psychology is no closer to considering the idea than it was in 1902. Surely one root of this blindness is the way in which the categories and imagery of our society envisage an otherworldly religion and a naturalistic psychology which are on different planes of existence altogether and cannot communicate with one another. The distrust of first person experience, which B. Allan Wallace discusses (this volume), is one important aspect of this divide. I believe that the Eastern meditation traditions, particularly Buddhist thought and meditation, can help to bridge the divide and thereby show a new direction in which the study of the kinds of experience that our society has classified as religious can impact research in psychology and the emerging cognitive sciences.

This is not purely an academic issue. Religion is deeply important to people. It deals with, in the words of William James, “whatever is seen as most primal and enveloping and deeply true.”¹ Our world is being torn apart by the chaos that can result when people feel their religion deeply violated. Yet modern psychology, like modern politicians, seems able only to talk *at* religions rather than to listen to them.

Once we have divided the world into natural and *supernatural*, noting that these are our own conceptual categories, and defined religion as being about the latter, then the direction of causal explanation in naturalistic science can flow in only one direction—from psychology and cognitive science to religious beliefs and feelings. This has typically meant a reductionist-materialist “explaining away” of various aspects of religion. Religious faith may be explained in terms of psychoanalytic childhood experiences—as has been done since Freud; supernatural beings explained by the “theory of mind” that children develop by age four,² or “oceanic” medita-

tion experiences explained by particular patterns of brain activity.³ What contribution could possibly come from the other direction?

What William James did, and in this he has been followed by many other researchers in what is now called the “qualitative study of religion,” is to catalog and classify many striking examples of religious experiences. The virtues of this approach are that it captures our attention; it allows the mind to resonate with the experiences described; and it may stimulate inquiry. The core problem with this approach is that it identifies religious experience with special states of mind, states of mind that are essentially different from “normal waking consciousness,” states which are often called mystical. It does not challenge our image of what normal consciousness itself may be. Indeed, the very term *mysticism*, throughout its history of use in the West, may be seen as a way of marginalizing an entire mode of understanding. Whether denigrated as a medical symptom or exalted as a religious ideal, either way, to classify something as mystical is to dismiss it as serious commentary on the nature of the human mind, body, or environment. This is where the Eastern traditions can play a crucial role. The theistic religions of the West may claim that man was created in God’s image, but it is left to Hinduism, Daoism, and especially Buddhism to challenge what that image actually is.

Here is the image of a human in present experimental psychology and cognitive science: the human mind is seen as a determinate machine. Isolated from the environment within the biological body, the mind peers tentatively out at a piecemeal and initially incomprehensible world, seeking to find the simplest possible predictive contingencies between objects and events so that it may survive. It stores the results of its experience in memory to form a coherent but inherently indirect and abstract representation of the world and of itself. Its ideas, emotions, actions, and consciousness have evolved to fulfill the only originating value which is to survive and reproduce in an evolutionarily successful manner in a world of limited reward and much threat.

Such a portrait is not alien to the Eastern traditions. In Buddhism it is somewhat analogous to samsara, the wheel of existence to which sentient beings are bound by their habits; in Hinduism it might be depicted as lower states of consciousness; and in Taoism it might be portrayed, with a smile, as the activities of the monkey in us. All three Eastern traditions agree that in this habitual state of mind, we are mistaken about everything important—about who and what we are, what is real, and how to act. But this is not the only possible mode of knowing the world. The alternative? Tibetan Buddhism proclaims a primordial wisdom, a basic state of knowing that is “not fabricated by mind”; Zen speaks of original mind and “no-mind”; Hinduism has the Self; and Taoism talks about the Tao or the “Source.”⁴ All agree that “this” is our original, natural, fundamental state, what we are right now, *not any particular or special experience*. When we realize this

wisdom, the phenomenal world, including the sense of self and all other problems, is known as the timeless perfect radiance of that basic ground from which actions of integrity and compassion flow in effortless nonaction. When we do not realize this wisdom, we run around like madmen and destroy ourselves and our world—as our species is now doing. We also make silly theories about things.

For clarity let us call our more limited habitual mode of knowing *consciousness* (Skt: *vijñāna*, Tib: *nam she*) following the technical vocabulary of Buddhist psychology in the *abhidharma*,⁵ and let us call the alternative more comprehensive form of knowing *awareness*.⁶ Note that we do not have to assume that the basic state spoken of by different traditions is the same—who could know?—in order to discuss an alternative mode of knowing.

Were awareness available only to a few religious athletes, it would be of little use either for daily life or for science. But it is said to be widely available, in fact closer to us than our own eyes. The trick is that consciousness and awareness are not actually two separate things—and this is where talking about such matters becomes elusive—because all experience is actually made out of awareness. This is analogous to Plotinus’ “what sees is not our reason, but something prior and superior to our reason.”⁷ And Rumi reminds us: “We seldom hear the inner music; But we’re all dancing to it nevertheless.”

This point might be clarified, hopefully, by a computer analogy. The consciousness mode of knowing the world can be likened to a particular computer program running on a more basic operating system. In daily life and in cognitive science we mistake the limited consciousness program for the whole system. We keep trying to study how the system works, but all we can see is the functioning of the program in which we are confined. Every attempt to see beyond or get out of the program, either in science or in religious striving, is frustrated because to try to get out, we are only using the operations of the program itself.

Such a possibility ought to give scientists of the mind some pause because it implies that the very techniques, rules, hypotheses, assumptions, tests, and suspicions designed to make study of the mind, or religion, objective are themselves but products of operations of that same program. Let us take as an example the issue which Wallace’s paper analyzes—the validity of first person knowledge as a part of cognitive science. What the Eastern traditions, and Buddhism in particular, have to contribute to this issue is to ask, Who is that first person? If one takes for granted the picture of a person in standard cognitive science, one may well doubt that person’s authority to speak, but awareness might lead one to challenge all of our accumulated foundational assumptions.

How do we do that? How do we get out of the program? Where is the exit key? There are at least six major methods common, in varying degrees,

to all the world religions: (1) Go directly to awareness, if such a thing is possible. Since the senses and thoughts are manifestations of consciousness, eliminate them. (2) Find awareness in the everyday experiences of consciousness itself, *including* the senses, which are but awareness after all. To do this, cultivate intense mindfulness and intimacy with ongoing experience. (3) Begin by working with the body; find its energy aspect (*prāṇa, chi, lung*); and from there ascend to increasingly subtle modes of knowing. (4) Practice open-hearted devotion to personifications of the ultimate. (5) Identify with and imitate exemplary beings, such as saints. (6) Work in service to other beings.

All of these paths exploit the characteristics of consciousness to find the more fundamental ways of knowing of awareness in order to pursue spiritual goals, and all of them to some degree are included in each of the world's major religious traditions. I would argue that, from the point of view of psychology and cognitive science, the second path, that of mindfulness of experience, is the most immediately useful since it involves closeness, familiarity, and investigation of the very activities, emotions, and concepts of daily life with which psychology and cognitive science are concerned. It is Buddhism which has specialized in this path. That is what makes conferences and discussions of Buddhism and cognitive science particularly relevant and why most of the following discussion will be grounded in Buddhist thought and practices.

It is the understanding that consciousness is really awareness in disguise that makes our endeavor possible. Consciousness is constantly making gestures toward its more basic knowing capacities. I like to think of the following categories in this paper as the Six Great Gestures. Let's now look at some of the most psychologically relevant gestures and intimations of wisdom awareness as they may appear in ordinary life.

I. PACIFYING: FINDING THE UNBIASED MIND

Try the following exercise: stop what you are doing for a moment, settle down, take a few deep breaths, and just listen. Relax the ears and let sounds come in. No need to think anything about the sounds. Traffic noises, the chirping of birds, the hum of appliances, human voices . . . just listen. If the mind starts to wander, relax and come back to listening. Does this feel different from the way one normally hears things? How?

The mind operating from consciousness does not ordinarily simply let in or allow experience. Consciousness is attracted and repulsed by polarities: pleasure versus pain, gain versus loss, praise versus blame, fame versus disgrace . . . Polarities are centered around Me, the ego, and what I want, don't want, and don't care about. This has been noted by psychology: according to appraisal theories of affect,⁸ appraisals of how an event may

affect the self are the source of the basic emotions. Economic theories, increasingly the form of psychology which influences public policy, are based on the assumption that choice behavior, all of it, is rooted in self-interest. Yet the mark of religious and meditative experience (or at least doctrine) is the capacity to give up or go beyond one's limited ego and the subsequent ability to perform genuinely compassionate acts. Such possibilities have scarcely entered psychological theory. The Buddhist sensibility would seem to provide a bridge.

Before we argue about whether self-interest reigns supreme, what is meant by self? The argument of this paper is that we are not limited to what our "daylight consciousness" might imagine us to be. In Buddhist psychology that consciousness is described as follows: in each moment of consciousness there is a sense of a perceiver, an object of perception, and a relationship between the perceiver and the object. Look at the wall in front of you right now—is this not true? The perceiver seems inherently separate from the object. That object, that world, is seen as either desirable or threatening or boring to the perceiver who then has the impulse to act towards the world on the basis of his/her conceptions and past habits, grasping after the desirable, rejecting the undesirable, and ignoring the irrelevant. Such cognitions and actions only breed further habits. Desires can never be satisfied because to obtain a desired object only strengthens future habits for either grasping-greed-passion or, in the negative case, fear-aversion-aggression, or in the neutral case, indifference-stupidity-ignorance. Relationships with other people can only be governed by self-interest since they are based on desire, aggression, or ignorance. A being operating from consciousness is trapped in systems, or realms of the self-perpetuating logic of these three basic impulses; for example, the present escalation of world conflict can be seen as a classic example of the way in which aggression feeds back upon and perpetuates itself. The name for this whole system in Buddhism is *samsara*, the wheel of existence, to which sentient beings are bound by their habits and in which they will remain until, through training in meditation, they become aware, rather than mindless, of their mental processes and actions in everyday life. Analogous descriptions of lower levels of consciousness abound in Hinduism and Taoism. And in Western religions such a state might be called sin or the experience of separation, or apparent separation from God.

Is there any alternative? The listening meditation with which this section began was perhaps designed to give a quick glimpse of an alternative way of using the mind in relation to the world, a glimpse of a mode of knowing which simply allows and is not thrown off balance by experiences. Beginning Buddhist meditation techniques, such as focusing on the breath, typically have similar goals but also involve an element of concentration which generally requires more time to develop.

The development or discovery of the awareness mode of knowing is sometimes described in terms of four kinds of Buddha activity,⁹ the first of which is called *pacifying*. The idea behind pacifying is that our basic mental state of knowing is a very simple one that is without the biases of polarized desires and aversions. But we need to settle down in order to open to this. I've suggested a listening practice here because the pacifying, settling, and opening qualities of the ear and of hearing, i.e., ordinary sensory processes available to everyone, have been long known in a number of traditions. For example, in some Chinese medical systems the ear and hearing is the water element so that simple listening can pacify even the body. And Freud advised psychoanalysts to listen to the patient with "evenly suspended attention"¹⁰ and to "simply listen, and not bother about whether [one] is keeping anything in mind."¹¹ You might want to try the listening exercise again, now extending the scope of the practice so that you are "listening evenly to" thoughts and emotions when they occur, as well as listening to external sounds.

Once the mind is settled somewhat, it can begin to open to experience, any experience, in an unbiased way. People may describe such a relationship to experience as feeling-centered, unable to be knocked off base by the pulls and pushes of experience, or as centerless, able to include and be with all experiences equally. Note that this is not indifference which is one of the motivations of the more limited consciousness. Awareness is perhaps closest to the appreciative mode with which we experience the arts. Have you ever noticed that, since you know you're not the character in a book or film, you can identify and participate sometimes more fully than in real life in the vividness of that character's delightful or horrific life and world?

Emotions and emotionality, as known by awareness, have various levels of implication for psychology and cognitive science. In the first place, there is the attentive observation which mindfulness allows of the ongoing stream of feelings. Affect psychology is just starting to discover by experimental means some of the features of emotions that meditators have known for centuries. Among such discoveries: emotional responses are not continuous but rise and fall in waves; emotions have both a bodily and a conceptual component; emotions are influenced by egocentric appraisals of the situation; changes in appraisal can change emotion although the situation remains objectively the same; negative emotions can be counteracted by evoking positive feelings; and positive emotions can be explicitly cultivated.¹² Less easy to operationalize by specific experiments are research questions concerning the useful energy available in negative as well as positive emotions; the fate of satisfied desires (anticipatory satisfactions dissipate when goals are achieved)¹³; and the clinical usefulness of treating emotions as something that one can experience but about which one need do nothing further.¹⁴

There are deeper issues which such investigations might reveal; William James, that master of expression, again gives us a glimpse. "The more commonplace happinesses which we get are 'reliefs,' occasioned by our momentary escapes from evils either experienced or threatened. But in its most characteristic embodiments, religious happiness is not a mere feeling of escape. It cares no longer to escape. It consents. . . ."15

II. ENRICHING: INCLUDING EVERYTHING

A. Expansiveness, Panoramic Vision

Awareness does not stop with pacification. Once one has found the mode of knowing that is not pushed and pulled by the content of experience, awareness can encompass and include all sides of experience. One can start to know the world in an inclusive rather than an exclusive manner. This is part of the second Buddha activity, that of *enriching*.

Think of a time when you were driving along a winding mountain highway and stopped at a vista point. Remember what it was like to look out, to feel the sense of mountains, valleys, sky, and space around you, and, perhaps, the awareness of your own body and senses as a small point within this vast surround. Or perhaps such an experience has happened to you in a city with tall buildings. Or amongst people, as in playing a team sport in which, for a moment, the movements of all the other players seem known as a whole. Martial artists and star basketball players frequently report experiences like this. To make the demonstration more pointed, you might wish to stop for a moment and perform a short exercise. Let your eyes focus on a small object in front of you such as a spot on the wall, a pen, or the journal in which you're reading this. Then, keeping the central focus, become aware of your peripheral vision, and, let peripheral vision expand. Remain that way for a few moments. Now find a focus inside your body such as the center of your chest, or belly or head. Then let awareness expand to surround the body (front, back, sides, above, and below); let it expand further to the walls of the room, and further into space.

In this exercise, we've used not the ears but the visionary quality inherent in the eye and vision. The mind of awareness is vaster than we may ordinarily think, and this is potentially relevant to our cognitive sciences. As the meditation practitioner tunes into a more basic and more integrated sense of being and knowing, a realization quite revolutionary to our psychology may begin to dawn: perceiving and knowing are not something limited to a personified consciousness confined behind the eyes peering out at a separated world, but are something happening from all of it together: environment, mind, and organism. The supposed knower is just a part or aspect of this knowing field.

Our present science of perception, both physiological and psychological, is based on investigating how information from an external world can be picked up and interpreted by the sensory systems and brain of a separated and self-enclosed organism. What religious, meditative, and often artistic experience suggests is a kind of knowing in which one is not separate. Accounts of conversion or inspiration are filled with moments in which the speaker experienced being "at one with all creation." These kinds of statements are usually dismissed by science as the province of incomprehensible everything-is-one mysticism. What Buddhist thought and meditation provide is the possibility that this nondualistic mode of knowing the world is literally true of the way the senses function in ordinary life. This is something of which ordinary people, and particularly artists, can have strong intuitions. Consider, for example, both our exercises here, but also Chinese landscape painting.

The kind of knowing in which mind and world are not separate has not gone entirely unnoticed by perceptual psychology. The major figure in this arena has been J. J. Gibson. "To perceive the world is to coperceive oneself The optical information to specify the self . . . accompanies the optical information to specify the environment The supposedly separate realms of the subjective and the objective are actually only poles of attention."¹⁶ Perception is *direct* for Gibson in that it is the percept, with all of its immediate information about both subject and object, which is primary. Gibson backed up his insight with a new way to describe the world called ecological optics. Gibson's program of ecological psychology has spawned a robust research tradition,¹⁷ in the process, however, Gibson's experimental demonstrations have come to predominate and his overall vision appears to be presently in eclipse.¹⁸ Several more recent biological accounts have focused on the relationship between the organism's sense receptors and its environment.¹⁹ These accounts are driven by the experimental finding that the same environmental stimulus produces markedly different electro-physiological responses in the brain depending on the context of the stimulus and the state of the organism at the time the stimulus is delivered. Thus we cannot speak of a stimulus as something independent of the organism. Jarvilehto argues that biological science (and by extension other fields) must view and work with organism and environment as a single system. While neither Gibsonian ecological psychology nor biological systems thinking have yet penetrated mainstream perceptual research, they do indicate the kind of synergy that can exist between meditation experience and concrete research strategies.

The expansiveness of awareness also has clinical importance. When people feel small, limited, fenced in, and estranged they feel bad; when they feel at one with something larger they feel better, sometimes remarkably so. In William James' words "when we have a wide field we rejoice."²⁰ Creative action too stems from a wide field; again James'

eloquence: "Your great organizing geniuses are men with habitually vast fields of mental vision, in which a whole programme of future operations will appear dotted out at once, the rays shooting far ahead into definite directions of advance."²¹

Note here how theoretical basics and clinical usefulness go together. It is a shift in one's basic mode of cognition, the functioning of the senses themselves, rather than any change of mental contents, which can affect such a radical change. The "new being"²² born of meditative or contemplative insight can have both personal and scientific import. The theme that finding one's more basic forms of cognition heals will be continued throughout our observations.

B. Causality: Interdependence, Top-Down Influences

Enriching expansion is also available to the operations of the intellect which, as academics know, has its own visionary capacities. Try the following exercise: Look at the piece of paper on which this is printed. On what does the existence of this paper depend? A cloud may seem remote from the paper, but "Without a cloud there will be no water; without water trees cannot grow; and without trees, you cannot make paper." And sunshine? "The forest cannot grow without sunshine, and we as humans cannot grow without sunshine. So the logger needs sunshine in order to cut the tree, and the tree needs sunshine in order to be a tree. Therefore, you can see sunshine in this sheet of paper. And if you look more deeply. . . with the eyes of those who are awake, you see not only the cloud and the sunshine in it, but that everything is here, the wheat that became the bread for the logger to eat, the logger's father—everything is in this piece of paper. . . this paper is empty of an independent self. Empty, in this sense, means that the paper is full of everything, the entire cosmos. The presence of this tiny sheet of paper proves the presence of the whole cosmos."²³ From the perspective of panoramic awareness, what we call an object or event is seen as part of an interdependent whole rather than as something with a separate identity. You might try looking at a bite of food in this way at your next meal.

The limited and enclosed consciousness attempts to see the world in terms of separate billiard balls striking each other with consequent results; expanded awareness tunes into networks of relations beyond what reason can consciously analyze. The expanded field view of phenomena has several implications for treatment of causality in psychology and cognitive science. For one, it challenges completely materialistic or bottom-up assumptions. From the point of view of interconnected wholes, causal routes and the possibility of our engineering changes in the field can come from many different directions. Prior to the twentieth century, it was not uncom-

mon to hold that causal influence traveled along the "great chain of being"²⁴ from the least material, most subtle, and most spiritual to the most material rather than vice versa. It is the intuition of the possibility of top-down causality which seems to have motivated Descartes' now much vilified puzzlement about how immaterial causes could affect the material body. Today, it is increasingly accepted in mind-body medicine that the mind can originate changes in the body. However, with a few exceptions such a stance is not pursued in cognitive science and certainly not in the newly burgeoning field of cognitive neuroscience.²⁵ In this respect, the applied clinical wing of science, with its pragmatic stance, may be ahead of what we think of as basic science. Challenges to the accepted image of the mind bring with them the possibility of causal routes originating from what we currently classify as the less material or even nonmaterial.

Perhaps even more obviously, a field view challenges reliance on single causes; in fact it may challenge the notion of cause altogether. Modern physics notwithstanding, the image of causality in most psychological and cognitive science experimental research is still that of individual billiard balls. Experiments are most easily performed and communicated, and are considered most elegant, when manipulation of a single variable can be tied to a single outcome. But psychologists have persistent intuitions that this is not the whole story. There is a push for developing new multivariate statistical tools so that many factors may be modeled at once. Practical "situated cognition" is the focus of another set of projects.²⁶ And various systems analyses are being attempted, such as the use of dynamical systems theory in developmental psychology.²⁷ (The reader might bring to mind his/her own favorite radical systems: feminist critiques of objectivity, chaos in society-movement writers, probability theorists. . . .) Such endeavors might find new stimulation and direction in the overarching vision of interdependence provided by meditative and contemplative insight. When consciousness has to cope with many variables at once, it becomes confused; when many factors are incorporated into the enriching expansiveness of awareness, the knowing mind can remain one pointed and simple even as it expands. Out of this state, many new understandings may arise.

An understanding of interdependence has clinical significance. It can provide people who suffer from guilt, depression, or anxiety with a vision of themselves as part of an interdependent network in which they need neither blame themselves nor feel powerless. In fact it may be that it is only when people are able to see the way in which they are not responsible for events that they can find the deeper level at which it is possible to take responsibility beyond concept and—depending upon the terminology of one's religious affiliation—repent, forgive, relax, or have power over the phenomenal world. More will be said of nonconceptual levels in subsequent sections.

Interdependence also has societal implications. The mandate for designing psychological experiments virtually demands that the form of the argument be posed as an opposition between single rival factors: nature *versus* nurture, form *versus* function. This is part of a general cultural pattern: our legal system, press reporting, talk shows, contests—all tend to be set up in terms of single oppositions. Anthropologist Deborah Tannen calls this “the argument culture,” of which the United States is an extreme example.²⁸ Not all cultures see things this way. Many legal systems emphasize mediation rather than adversarial procedures. Talk shows in Japan typically feature several speakers with a panorama of viewpoints who seek to come to a mutual understanding in the discussion. The concept of deep ecology originated in the Scandinavian countries. And in recent social psychology²⁹ a general cultural attitude called “naive dialecticism” has been identified as characteristic of Chinese thought in which human and natural characteristics are considered the product of ever-changing multiple circumstances, rather than as fixed, and in which compromise is considered a cognitive as well as social virtue which leads not only to social harmony, but to truth. We think of the way we structure scientific debate and experimentation as inherent to having an objective science; might it instead be the product of a particular cultural metaphysic?

There is a tendency for academics to blame the simplistic thinking in public life on a lack of reasoning ability in ordinary people. If religion is thought of at all, it is usually considered part of the problem. What we are suggesting here is that simplistic oppositional thinking is engendered by the absence of awareness and can be cured by the development of a genuinely meditative and contemplative sensibility in which enriching awareness need not to be seen as confusing or fearful.

III. MAGNETIZING: INSPIRING, UNIFYING

A. Directness: Unmediated, Real

Now that many things have been brought together under the purview of enriched awareness—magnetism! In sociology this principle is sometimes called “meeting and mating.” You look at a picture, read a book, do research on a project . . . and suddenly you get it. It happens. It’s all there together at once. Here we have the third Buddha activity, that of *magnetizing*. When the mind, its objects, and the other polarities of life are joined fully together with nothing left over, a new mode of direct knowing can blossom. We could call it direct experience.

Unbiased knowing may sound abstract or removed from experience, but mindful observation reveals that it is consciousness which appears abstract, filtered as it is through the dualism of subject and object and the ensuing tangle of memories, wishes, narrative, biography, and

conceptualization. I've heard Tibetan Buddhist meditators describe the emotions of the self-referential consciousness as two dimensional, like cardboard cutouts interacting. It is the inclusive knowing of awareness that allows the mind to get closer to experience, to be intimate with experience, to *be one's* experience. The result? One feels real.

Contemplation: It may be difficult to evoke a sense of direct experience because it is so close. It is like looking for your eyeglasses when you are already wearing them, are in fact using them to search. You might think of a time when you felt real, even hyper-real, alive, truly yourself. Try reliving the memory, intensifying it. Alternatively you might think of this as your last moment alive. Focus on the senses: the last visual image, the last sound, the last thought, the last pain. Do the memories or perceptions have a different quality than usual?

The state of unmediated direct knowing has implications concerning what should serve as the basic building blocks of cognitive science: "... a concrete bit of personal experience may be a small bit, but it is a solid bit as long as it lasts; not hollow, not a mere abstract element of experience ... It is a *full* fact, even though it be an insignificant fact; it is of the *kind* to which all realities whatsoever must belong; the motor currents of the world run through the like of it; it is on the line connecting real events with real events."³⁰ In contrast, in present cognitive science the major building blocks of theories tend to be cognitive representations which are abstract. J. J. Gibson argued vehemently against representations, but that aspect of his work has been largely ignored. There is much talk of embodiment at present, but introducing a bodily component into one's theory will not necessarily satisfy the intuition of a direct form of knowing. Neither will talk of *qualia* or other supposedly first person attributes as long as what we mean by first person is limited to the view from consciousness.

There are social and clinical implications to the issue of direct cognition. As documented by sociologists and illustrated in contemporary art, many people feel disconnected and alienated. People may try to "get real" by amping up sensory stimulation or by taking risks. From the Buddhist point of view, the cardboard cutout version of emotions and goals is like a printed menu that the starving try to eat as a substitute for food. Direct experience may satisfy and empower in ways abstracted consciousness never can. This is another example of the way in which basic cognition itself might serve as therapy.

B. Time: Timelessness

Consciousness is obsessed and controlled by time: the past, the future, memories, reliving of defeats, replays of emotion good and bad, plans, hopes, worries, fears, boredom. In the direct experience of awareness, there is another way of knowing time.

Contemplation: Recall an experience where time seemed to stand still or where life seemed to be complete in a single moment. It might be a moment of great personal meaningfulness such as a near death experience or a moment of love (Joan Baez sings, "Speaking strictly for me, I could have died right then . . ."). Or, it could be in a completely ordinary moment, such as walking down the street. Normally such experiences cannot be provoked, but you might try, for a moment, "recollecting in tranquility" some previous period of personal turmoil.

In Tibetan this other way of knowing time is called the fourth moment (Tib. *dus bzhi pa*) and described thus: "All phenomena are completely new and fresh, absolutely unique and entirely free from all concepts of past, present and future, as if experienced in another dimension of time."³¹ An analogous description of time figures in many experiential reports of Zen *kensho*; for example, "This is the eternal state of affairs. . . . There is nothing more to do. . . . There is nothing whatsoever to fear."³² *A Course in Miracles* brings a similar sense of time into a Christian context. Art has various devices for conveying such experiences such as the climax or denouement in narratives. The meditation traditions that talk in this way also say that every moment is like this, born afresh with no past from a timeless source.

We don't generally believe such talk. How can any experience be unmediated and free of time when we can so plainly see that the present experience is the result of who I am, my beliefs, feelings, expectations, and all my past experiences? This may be true and wisely seen, but it applies only to the *content* of the present experience. All of the interdependent past is causally gathered into the microcosm of the moment of present experience, but that does not mean that the basic mode of apprehending the present moment becomes somehow filtered or distorted or abstractly representational. Think instead, perhaps, of the present experience as enriched and magnetized, as a harvest of all the fruits of a life.

One might still object: even if true, how could such a vision apply to the demands of daily life? The answer may be that it is actually much simpler to live timelessly: "Of Saint Catharine of Genoa it is said that 'she took cognizance of things, only as they were presented to her in succession, *moment by moment*.' To her holy soul, 'the divine moment was the present moment, . . . and when the present moment was estimated in itself and in its relations, and when the duty that was involved in it was accomplished, it was permitted to pass away as if it had never been, and to give way to the facts and duties of the moment which came after.'"³³

Meditative and contemplative experience of time would seem to contain two messages. One is for science. Since at least the time of Greek philosophy, Western conceptions of knowledge have been at war with temporality. Although each sensory experience is unique, fleeting, and of a particular thing, for the Greeks knowledge was necessarily only of what was universal and stable. In present cognitive science it is taken as unques-

tionable that both the subject and object of knowledge must last through time. Hence the reliance on cognitive representations, which are presumed to last, as building blocks. Yet, everything happens in the present; how could it be otherwise? Whatever effects one wants to attribute to the past, it is only the way they exist right now that can have influence in the future. To say that an organism has learned something means that the organism has changed in a specific way. To say that the organism remembers means that he is in a certain state in the present. For a human to say she has a memory means that she has something going on in her mind right now that she labels a memory. A representation of the future is still a present representation. Because of this, there may be a good deal more freedom built into the system and a good deal more potential for change than our primarily stochastic models acknowledge.

The other message is for contemplatives and meditators. It has become fashionable to talk of staying in the present moment—you won't lose your car keys and you don't worry as much. Good practical advice it is and should be honored as such. However, the present is also the only moment of awareness and of realization of whatever deep truths one's tradition has to offer—however that may be expressed: a sense of sacredness, "the nature of mind," God's love, redemption, liberation. . . . The philosopher may object that the present moment is specious, nonexistent. Just so, says the Buddhist meditator, and that is precisely what makes it the gateway to knowing reality in a way that the temporal mind of consciousness cannot; it is what makes it the portal to the mind of openness and of freedom.

IV. RELEASING: FREEDOM, OPENNESS, EMPTINESS

The climax, the denouement, then releases us from the story. This is often called the Buddha activity of *destroying*, but that word may have the wrong connotation for us in this context. According to Mahāyāna and Vajrayāna Buddhism, each moment is inherently not only timeless but also open ("empty"), and free ("self liberated"). Both meditation and transmission from dharma teachers are designed to point this out.

Ah, but ordinary life does too; humor is one of the most immediate ways. Laughter releases! As a contemplative exercise, think of times that it did it for you. Hearing about people who have everything but still feel miserable also seems to release—as in our fascination with tales of tortured movie stars and the life of the Buddha alike. Actually, shock itself releases. In real life, we may be too busy coping with the implications of the shocker for our survival to notice the open instant, but think of the effect of the juxtaposition of images in a *haiku* or those beloved scenes in classic horror movies where the audience screams. As a matter of fact every moment releases; this is one of the open secrets of life.

Emptiness (*śūnyatā*), as used by Buddhists, does not mean that one's consciousness sits somewhere behind the eyes looking out at blankness, though with effort one can certainly produce such experiences. Rather it is that the knowing of what is real changes fundamentally in awareness. This is sometimes described as a certain nakedness of mind. From the point of view of awareness, "naked I came into the world" applies to every moment.

There are clinical implications to all this. One small example: remember a time when you heard a really good joke about something that was bothering you at the time, e.g., teenage children, parents, dieting, or doctors. Can you remember the feeling of gentleness that settled in for a moment thereafter? If the bothersome person or situation was at hand or came to mind just then, how did you feel or act towards them? Releasing also means releasing into action—as in the Japanese archery practice *kyudo* when the arrow is finally released from the taut bow and flies to the target. Ideally action that one has come to in this way—through awareness rather than consciousness—flies accurately and effortlessly like the arrow.

In Mahāyāna and Vajrayāna Buddhism it is said that the experience of openness is inseparable from the arising of compassion. It suggests that the greatest personal changes may not be wrought simply by replacing one cognitive-emotional state by another somewhat better one (an endeavor which has been likened by some contemporary Buddhists to rearranging the deck chairs on the Titanic) but by tuning into the naked, open, and free nature of all states. And who knows what this might not do for our sciences?

V. RETURNING HOME: INHERENT VALUE

So what's so good about being released? It's that one returns home—or realizes that one was there all along. If we were to think of all the aspects of awareness which we have discussed as having the form of a *maṇḍala*, this one would be the center. This is not spoken of as one of the Buddha activities because the unconditional center never "does" anything. When we are deeply struck, for example, when the terrible climax of a tragedy is known and felt as perfect, we seem to catch a glimpse of a mode of being that has nothing to do with survival or achievement or any of our usual motivations.

In science and education, facts and values are considered indisputably two separate things, but in Buddhist meditation, deeply looking into the nature of what it is to know and to be a knower leads to a vision of the world as *unconditional*. The closest English word to that sensibility seems to be *value*.

The unconditional is probably the most difficult intuition to evoke directly by contemplation because it is what we are made of; to try to find

it is like looking elsewhere for one's head or heart. But despite the compulsive grip of the conscious mind on conditional values (success versus failure, pleasure versus pain, good versus bad), humans retain intuitions of their basic state. Consider the concept of unconditional love: how many Westerners blame their mothers for not having given it to them—or, now with advances in sexual equality, their fathers too? Grouchiness about imperfection means that one has some intimation of perfection. Note how profoundly people embrace commitment to principles or causes beyond reason, long for undying love beyond surface attributes or events, and cleave to an unconditional God beyond limitation or understanding. How many remarkably ill-written romances become wildly popular if they can successfully trigger a glimmer of deathless love? Look at all the trouble theologians have made for philosophy as they try to reconcile the intuition of the unconditioned with anthropomorphic imagery.

In academia we are as allergic to taking value seriously as we are to religion. Might the introduction of contemplative and meditative insights allow value to start to be explored in a more meaningful manner in psychology?

VI. ACTION; SPONTANEOUS ACTION

Action is the fruition of realization. In Buddhism, *intentional actions* are actions that originate in consciousness, and thus are controlled by habits and what is wanted or not wanted by the small ego self. *Nonaction*, or in Vajrayāna Buddhism, *the wisdom of all accomplishing action*, is spontaneous action which arises from the expanded field of awareness and the depths of openness. It is compassionate and it can be shockingly effective. Western religions also teach of a way of living that comes from beyond one's limited self. "There is a state of mind, known to religious men, but to no others, in which the will to assert ourselves and hold our own has been displaced by a willingness to close our mouths and be as nothing in the floods and waterspouts of God."³⁴ Recall Mother Theresa's famous, "I am only a pencil God uses to write with."

Even the habitual actions of daily life can gesture in the direction of this wider field. Think of the spontaneity of conversing with friends (you're not reading your replies off a teleprompter), or the sudden clarity of writing a paper when the deadline looms. Note how the concepts of *flow* and of *being in the zone* have captured the popular imagination. And then there are those actions that just seem to pop up out of nowhere, as in discovering that one has dived into icy water to save a drowning child, uttered an unusual but magically appropriate statement to comfort a friend (most clinicians have at least one story in which this happened with a client), or executed a complex martial arts maneuver before the cues showing the need for it were available.

Psychology has long been in conflict over the issue of action: should it be conceived as stimulus and response or as part of a top-down information processing system? Does consciousness actually affect behavior, or is it an epiphenomenon? Presently there is great excitement over experimental demonstrations of behaviors that might appear voluntary but actually precede conscious intentions or are dependent on experimenter-manipulated variables outside of the subject's cognizance.³⁵ Psychology and cognitive science tend to assume that if behavior occurs outside of consciousness, it must be the product of low level automatic mechanisms. What the experience gained by religious contemplation and meditative awareness have to offer to the sciences in this regard is the distinction between automatic behavior, which stems from habitual impulses, and another kind of spontaneous action which can come from the wider field of awareness.

Action has still another face; it affects the mind. Mercy is twice blessed because it touches the giver as well as the receiver. Social psychology has long documented the sometimes strikingly counterintuitive influences that actions can have on beliefs, exemplified in sections on cognitive dissonance, attitude change, or attribution in any social psychology textbook. The self-transformative powers of virtuous action are celebrated in all religions. Most self-improvement regimes in popular culture are based on similar premises. Buddhism goes one step further. In Mahāyāna and Vajrayāna Buddhism, wisdom and compassionate action are seen as co-defining and inseparable. That is how a path is possible. This is why it is so useful to find and follow the gestures made by the everyday mind toward awareness. It is how service to other beings can form a viable path. Imitating the mind-set of wisdom (as in meditation) or the actions of compassion can bring about the real thing, and Buddhism, like other traditions, has a veritable arsenal of practices designed to tap into that capacity. Such an insight supplies the final piece to the puzzle of how one can ever exit from the imprisoning consciousness program; one does not need to exit but only to find the active compassionate wisdom of awareness that lies at the heart of consciousness itself. In a troubled world, the possibility that religion, meditation, and psychological science might combine to offer a path of compassionate action is hardly to be dismissed.

VII. CONCLUSIONS

Study of the kinds of experience that our society classifies as religious, when done through the medium of contemplative and meditative awareness, can contribute, in quite specific terms, to cognitive science and clinical practice as they are presently done. Beyond that, this kind of study offers a radical new paradigm and mode of investigation, for it calls into question

the accepted understanding of the person or self, both as the subject of investigation and as the investigator. The portrait of a person or self that emerges from these six themes of awareness is fundamentally different from the person or self in either folk or psychological conceptions. We think of the person as a limited and bounded entity, yet the knowing we have discussed crosses person and environment. We think of the bounded self as subject to specific causal contingencies, but this sense of knowing perceives a vast web of interconnectedness. The familiar understanding of a person involves extension of the self through time by means of personal autobiographical memories and projected future plans, while the sense of a self in awareness is momentary, present, and timeless. The ordinary sense of self-knowledge involves a separated knower which knows itself and everything else by means of abstractions and concepts, whereas awareness-knowing is unmediated and direct. We think of the actions of the self as the products of conscious or unconscious intentions and decisions; however, here we have actions arising from something more inclusive, compassionate, and effective than one's personal motivations. The ordinary notion of the self is of someone who strives ceaselessly after conditional values, but the awareness sense of knowing is in touch with unconditional value. Value goes even beyond the self as knower and the self as actor to address the self as desirer—even as lover (as in the title of this paper which refers to the Elizabeth Barrett Browning poem "How do I love thee? Let me count the ways.") This sense of awareness knows that there is nothing inherent to strive for, that it already has, and had before it ever began, the heart of the heart's desire. It is on this basis that it can ceaselessly act and create within and for the world.

The limited self should not be the basis of daily life (note the bumper sticker "Don't believe everything you think"), and it cannot serve as the only basis for psychology as a science, either in the first or the third person. But awareness-knowing may have a different kind of authority. Cognitive science asks how consciousness is built up out of progressively simpler and less intelligent material components; contemplative and meditative practitioners might well ask how the vast, deep, and sacred mind of awareness can become constricted into the so familiar consciousness by which we run our affairs.

In this paper, I have tried to show how the study of contemplative and meditative insights can serve as a bridge between scientific psychology and the kinds of experience that our society has classified as religious. Perhaps such study can be the spark that at last unites the two outstretched hands of Michelangelo's fresco—however one may wish to interpret those hands.

NOTES

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“How do I love thee? Let me count the ways.” One of the most famous opening lines in all of English love poetry. Yet how much do we really know about this poem? Who can quote the second line, for instance? The poet who wrote this sonnet, Elizabeth Barrett Browning, is now overshadowed by the work of her husband, Robert Browning, so it’s worth delving a little deeper into this love poem, by way of close textual analysis. How do I love thee? Let me count the ways. I love thee to the depth and breadth and height My soul can reach, when feeling out of sight For the ends of being and ideal grace. I love ... How can you improve your cognitive processes? Tips and activities to improve your mental processes. 1. Take care of your health. We can train our cognitive processes at any stage in our lives, regardless of age. Here are some tips on how to train and take care of your cognitive processes. 1. Take care of your health. Our physical and mental health is inseparable from our cognitive processes. 8. Let your children solve their own difficulties. We need to support our children, however, it’s also very important that they don’t get used to us solving all their difficulties. Solving problems is a way to strengthen cognitive processes, therefore, starting at a young age is important. Giving clues is a perfect way to encourage children to think outside the box. “Let me know you, Rick.” He frowns, feeling the comfortable atmosphere ebb away at the cryptic words. “You know me.” The way she’s avoiding his gaze, and obviously itching to be out of his embrace and flee from the discussion, he knows something else is going on. He says as much to her, gently, not demanding, his fingers sliding soothingly over her lower arm. “Kate?” he prompts gently when she remains contemplative. He pauses to allow her to take in his words, to process the past few minutes. When she relaxes against him, he finds relief. “So we’re good?” murmurs Castle eventually into her cherry scented locks, sifting his nose through the strands in a re-exploration of her being.