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MEDITATION PRACTICE AND RESEARCH

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Summary

This article provides an introduction and overview of meditation practice, theory, and research. The models of human nature and consciousness from the meditative traditions are compared with traditional Western psychological models, and the former are suggested to encompass a wider range of states of consciousness and psychological well-being. The various models and mechanisms, psychological and physiological, Eastern and Western, that have been advanced to account for the effects of meditation are reviewed. Meditation practice is discussed both as a self-regulation strategy for specific psychotherapeutic and psychophysiological aims and as a discipline for deep self-exploration and transformation. When used for intensive self-exploration, meditation is best viewed as one component of a process demanding and producing a thoroughgoing transformation of all aspects of life and thought. The progression of experiences, insights, and states of consciousness that tend to emerge with intensive insight meditation are descibed, as are the author's initial experiences. The research literature on the effects and therapeutic applications of meditation is reviewed.

> We know the outer world of sensations and actions, but our inner world of thoughts and feelings we know very little. The primary purpose of meditation is to become conscious of and familiar with our inner life. The ultimate purpose is to reach the source of life and consciousness.

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> Skill in meditation affects deeply our character. We are slaves to what we do not know; of what we know we are masters. Whatever vice or weakness in ourselves we discover and understand its courses and its workings, we overcome it by the very knowing; the unconscious dissolves when brought into the conscious [Sri Nisargadatta Maharaj, 1973, p. 15].

Within the last decade meditation has gone from a little-known and much dismissed esoteric practice largely confined to non-Western cultures and spiritual practices to a popular self-help tool widely used by Westerners. The rapidity of this shift has been dramatic, and there are now several million people practicing meditation in the United States alone. In addition, a significant body of research has emerged, and there has been an initial recognition of the wealth of information present in some traditional texts, both Western and non-Western.

DEFINITION

The term "meditation" refers to a family of practices that train attention in order to heighten awareness and bring mental processes under greater voluntary control. The ultimate aims of these practices are the development of deep insight into the nature of mental processes, consciousness, identity, and reality, and the development of optimal states of psychological well-being and consciousness. However, they can also be used for a variety of intermediate aims, such as psychotherapeutic and psychophysiological benefits.

HISTORY

The beginnings of meditation are lost in antiquity but can be traced back for at least 3000 years. Since then, it has spread across cultures and centuries.

Although there are many varieties of meditation, they all have much in common. All train awareness and work to bring the mind under

greater voluntary control. However, individual practices may vary in the object of awareness, such as the breath, special images, or emotions (such as love), they may use different types of attentional strategies, and they may have different intermediary aims, for example, the cultivation of specific attributes and virtues such as generosity, love, compassion, concentration, or wisdom.

Specific meditation practices have evolved across the centuries, reflecting the insights, proclivities, and cultures of their practitioners. For example, the basic practices taught by the Buddha some 2500 years ago have been maintained largely in their original form in Southeast Asia, have elaborated into a complex family of practices in Tibet, and have merged with Taoism and other disciplines to form Chan in China and then Zen in Japan.

In Western Christianity, certain forms of prayer and contemplation share meditative goals and practices, and a deep contemplative movement has existed since the earliest days. Indeed, the newly discovered gnostic texts, such as the Nag Hammadi Library (Robinson, 1977), suggest that the traditional images of Christ and the early church that we have inherited represent a conservative perspective from which a rich contemplative and mystical dimension has largely been omitted. The Jesus of these texts "speaks of illusion and enlightenment, not of sin and repentance" (Pagels, 1979, p. xx), and instructions similar to the following by an early church father, Dionepius Areopagita (Conze, 1975, p. 19), could be found in any Eastern meditation text:

> Do thou, well-beloved Timothy, in thy desire to arrive at mystic contemplation, compel thyself to be disentangled from the senses, and from the workings of the mind?

However, by and large Christian orthodoxy has been suspicious of the mystical and gnostic, with their claims of personal understanding and awakening independent of prescribed approaches. Consequently, contemplative approaches and understanding have been excluded from the central role that they hold in certain Eastern disciplines. The significance and cost of this fact may be difficult to overestimate (Needleman, 1980; Wilber, 1981), especially when it is recognized that the esoteric cores of the great religions center on training in consciousness modification.

Several factors seem to have facilitated the recent increase in interest in meditation. These include the human potential movement, the diminution of the materialistic dream and a search within for the satisfaction that was not found outside, a growing interest in non-

Western cultures and philosophies, and research into the nature of altered states of consciousness.

From the research on altered states came the recent and startling recognition that portions of some of the world's great religions can be viewed as state-specific technologies for the induction of higher states of consciousness. At the esoteric core of these disciplines, as opposed to the articles of dogma to which the masses adhere, lie precisely delineated practices aimed at training awareness and mental processes (Tart, 1975; Wilber, 1980; Walsh & Vaughan, 1980a). One of the most widespread and central of these practices is meditation, which is often regarded as a cornerstone of advanced work in these disciplines.

In the West, a relatively small percentage of people also practice meditation with this perspective. However, a much larger population uses it for its short-term benefits, such as relaxation, stress management, self-confidence, and a generally heightened sense of psychological well-being.

Behavioral scientists and mental health practitioners have also become interested, seeing meditation as a tool with potential both for facilitating the therapist's effectiveness and as a self-regulation strategy useful for a variety of clinical disorders. A sizable body of research now suggests certain clinical applications and lends support to some of the claims made by practitioners across the centuries. This research literature is rapidly expanding, and more than half of it has been published within the last five years; for reviews, see Shapiro and Giber (1978), Walsh (1979), Shapiro (1980), Shapiro and Walsh (1983), and Walsh and Vaughan (1980a).

THEORY

Meditation stems from and leads to a view of human nature, mind, psychology, and consciousness that differs markedly in some ways from our traditional Western psychological perspectives. In this section, I will first examine the nature of the meditation model, then compare the traditional Western view of it, and finally examine the mechanisms that may be involved in producing the effects of meditation.

The Meditation Model of Consciousness

Our traditional psychological and psychiatric models posit a limited number of states of consciousness, and our usual waking state is assumed

to be optimal. Some other states may be functionally useful, for example, sleep or dreaming, but most are viewed as degenerate and dysfunctional in one way or another, for example, delirium, psychosis, intoxication. No consideration is given to the possibility that states may exist that are even more functional than our usual waking one.

On the other hand, most meditation theories view our usual state as suboptimal. The mind is seen as largely outside voluntary control and as continuously creating a largely unrecognized stream of thoughts, emotions, images, fantasies, and associations. These are held to distort our awareness, perceptual processes, and sense of identity to an unrecognized degree. This distortion is described in various traditions as "maya," "samsara," or "illusion" (Goldstein, 1976; Goleman, 1977). The term "illusion" has often been mistaken to mean that the world does not exist. However, it actually refers to the concept that our perception is distorted to an unrecognized degree and hence is rendered illusory. From this perspective, we might argue that all human problems originate from the unrecognized inability to differentiate mind-produced fantasies and distortions from objective sensory data. For example, how rarely do we directly recognize and experience that we are the active creators of our perception and that the unpleasantness, provocation, attraction, aversiveness, beauty, ugliness, and so on that we think we see in the world are actually creations of our own minds.

> We are all prisoners of our own mind.
> This recognition is the first step on the journey of awakening.
> —Ram Dass (1975)

Fortunately, these claims about the nature of our usual state of consciousness, our lack of awareness, the unrecognized involuntary nature of many of our mental processes, and the distortions to which they are subject are readily open to personal testing. Anyone who is willing to undertake a period of intensive training in observation of his or her own mental processes, such as in an insight meditation retreat of perhaps one or two weeks' duration, will become painfully aware of this fact. Indeed, one of the major dicta of all the meditative traditions is that these phenomena should be experienced and known directly by the individual rather than by what others say about them. Many a behavioral scientist and therapist has heard of these things, yet has been shocked into grudgingly acknowledging their potency only after personally experiencing them (Walsh, 1977, 1978; Ram Dass, 1978; Shapiro, 1978, 1980).

Trained meditative observation reveals that our usual consciousness is filled with a continual flux of subliminal thoughts, internal dialogue, and fantasies. In becoming lost and identified with this mental content, awareness is reduced and distorted, resulting in an unappreciated trance state. Thus, from the meditative perspective, our usual state of consciousness is seen as a state of hypnosis. As in any hypnotic state, there need not be a recognition of the trance or its attendant constriction of awareness, or a memory of the sense of identity prior to hypnosis. Those thoughts with which we have identified may create our state of consciousness, identity, and reality (Walsh & Vaughan, 1980a, 1980b). In the words of Buddha (in Byrom, 1976):

> We are what we think.
> All that we are arises with our thoughts.
> With our thoughts we make the world.

From this perspective, the ego appears to represent the constellation of thoughts with which we usually identify and comes into existence as soon as awareness identifies unconsciously with thought. Indeed, deep meditative "self" turns out to be a rapid flux of individual thoughts that, because of our usual limitations of awareness, is perceived as solid and continuous. This is analogous to the experience of continuity and motion that our perception of the individual frames of a movie provides.

Since they view the usual state as suboptimal, the meditative traditions obviously hold that more optimal states exist. Indeed, they suggest that a large spectrum of altered states of consciousness exist, that some are potentially useful, and that a few are true "higher" states. The term "higher" indicates that a state possesses all the capacities and potentials of the usual states plus some additional ones (Tart, 1975). These higher states are seen as realizable through mental training; meditation is one particular type of such training. Thus growth is seen as a realization of these stages through the unlearning of unskillful and distorting mental habits.

At the summit of mental development lie those conditions of consciousness that are the goal of advanced meditation, known variously as enlightenment or liberation. Verbal descriptions must necessarily fail to do justice to the nature and experience of these conditions. Even the very word "state" is inadequate, since it fails to do justice to the dynamic nature of consciousness, and the ultimate condition of consciousness may represent the ground of all states rather than any individual state per se (Wilber, 1980). Readers wanting more detailed

accounts are referred elsewhere, especially to the works of Ken Wilber, who is probably the major integrator of different psychologies, both Eastern and Western, in the world today (see, for example, Wilber, 1977, 1979, 1980, his articles in the *Journal of Humanistic Psychology*, the *Journal of Transpersonal Psychology*, and *Revision*, and his chapters in Walsh & Vaughan, 1980a, and Walsh & Shapiro, 1983).

There is, however, a remarkable similarity of descriptions of these states across cultures and centuries by those who have taken these practices to their limits. So consistent are descriptions of these states of consciousness and the world view that originates from them that they have constituted the basis of what have been called "the perennial philosophy" (Huxley, 1944), "the perennial psychology" (Wilber, 1977), and "the perennial religion" (H. Smith, 1976). These are a description of consciousness, self, and reality that can be found at the esoteric core of all the great meditative-yogic traditions and religions (H. Smith, 1976; Wilber, 1977, 1980).

Comparing the Meditative and Western Psychological Models

Now let us examine what happens when traditional Western psychological models and the meditative models are compared. What becomes apparent is that what Kuhn (1970) has called a "paradigm clash" necessarily ensues. The terms "paradigm" and "paradigm clash" have been used loosely and too often, but will serve us here to give a sense of the problems involved in comparing models. Let us begin by examining what happens when the claims of the consciousness disciplines are examined from within a traditional Western framework.

First, claims for the existence of true higher states will tend to be dismissed, since the usual state of consciousness is believed to be optimal, and there is thus little place in most Western models for anything better. Not only will they usually be dismissed, but because many of the experiences accompanying these states are unknown in the Western model, they are likely to be viewed as pathological. Thus, for example, the experiences known as satori or kensho, intense but short-lived enlightenment experiences, include a sense of unity or oneness with the rest of the universe. However, since our traditional Western model usually recognizes such experiences only when they occur in psychosis, they are likely to be pathologized. Without an awareness of paradigmatic assumptions, it becomes very easy to dismiss such phenomena as nonsensical or even pathological, a mistake that has been

made even by some of the most outstanding Western mental health professionals. For good critiques of these types of error, see Deikman (1977), Krippner and Brown (1979), and Wilber (1980). Thus, for example, Freud (1962) dismissed oceanic experience as infantile helplessness, and Alexander (1931) interpreted meditation as self-induced catatonia, while the Group for the Advancement of Psychiatry (1976) viewed mystics as borderline psychotics.

When we reverse perspectives and examine the Western model from the perspective of the meditative model, even more startling conclusions arise. It can be seen that the meditative model is inherently a broader one than the traditional Western perspective, since the meditation model encompasses a broader range of states of consciousness, including all those recognized by the latter. Indeed, the traditional Western model can be viewed as a specific subset of the meditative model.

Thus the traditional Western model has a position vis-à-vis the meditation model analogous to that of the Newtonian model vis-à-vis an Einsteinian model in physics. The Newtonian model applies appropriately to objects moving at relatively low velocities, but when applied to high-velocity objects, this model no longer fits. The Einsteinian model, on the other hand, encompasses both low and high speeds and, from this broader perspective, the Newtonian model and its inherent limitations are perfectly logical and understandable (employing Einsteinian and not Newtonian logic, of course). However, the reverse does not hold, for Einsteinian logic and phenomena are not comprehensible from within a Newtonian framework. To try to examine the larger model from the perspective of the smaller is inappropriate and necessarily productive of false conclusions, since what lies outside the range of the smaller model must necessarily be misinterpreted by it (Walsh, 1980; Walsh & Vaughan, 1980a).

Viewing our usual state of consciousness from this expanded model results in some extraordinary implications. Our traditional model defines psychosis as a state of consciousness in which the mind is out of voluntary control and reality is misperceived or distorted without recognition of that misperception. From one perspective of the meditative model, our usual state fits this definition since it is suboptimal, out of control, provides a distorted perception of reality, and fails to recognize that distortion! From this perspective, our usual state is seen as a hypnotically constricted trance. Like individuals who live their lives in a smog-filled city and only recognize the extent of the pollution and limited visibility when they climb into the surrounding mountains, most of us are said to live our lives unaware of our restricted awareness.

Models and Mechanisms Proposed to Account for the Production of Meditation Effects

It is not clear how appropriate it is to think of certain mechanisms as mediating the production of meditation effects, since in a complex interdependent system, the very concept of mechanisms may be suspect, and there is always the considerable danger of reductionism. Thus, for example, meditation effects have been explained (away) as due to reduced oxygen consumption, sleep, brain wave coherence, and so on. In this section, I will first examine mechanisms and models proposed by Western psychology and neurophysiology and then discuss a non-Western model from Buddhist psychology, all the while trying to avoid the suggestion that any of these factors are all that meditation is, or are sufficient to account for meditation effects fully.

From one perspective, meditation can be viewed as a progressive heightening of awareness of, and disidentification from, mental content. In practices such as insight meditation, in which the student is trained to observe and identify all mental content and processes rapidly and precisely, this is particularly clear (Goldstein, 1976; Goleman, 1977). This is a slow process in which a gradual refinement of perception results in a peeling away of awareness from successively more subtle layers of identification. Thoughts with which one formerly identified become recognized as just thoughts.

For example, if the thought "I'm scared" arises and is seen to be just a thought, then it exerts little influence. However, if the individual identifies with that thought, then the experiential reality is that he or she is scared. This identification sets in motion a self-prophetic, self-fulfilling process in which experience and psychological processes appear to validate the reality of that which was identified with. This thought, "I'm scared," is now not something that can be seen; rather, it is that from which everything else is seen and interpreted. Awareness, which could be transcendent and positionless, has now been constricted to viewing the world from a single, self-validating perspective.

> There is nothing more difficult than to become critically aware of the presuppositions of one's own thought. . . . Every thought can be scrutinized directly except the thought by which we scrutinize [Schumacher, 1977].

With the heightened awareness that a trained mind can bring to bear, this thought may now be recognized again, and in recognizing it as only a thought, the individual goes from thinking that he or she is a scared person to the experience of being aware of the thought. Meditation may thus be seen as a process of dehypnosis from our usual hypnotized state of consciousness, which we call "normality" but which meditative traditions call "samsara," "maya," or "dreaming."

A number of other mechanisms are clearly also involved. Psychological mechanisms that have been suggested include relaxation, global desensitization, counterconditioning, and a variety of cognitive mediating factors. At the physiological level, suggested mechanisms include reduced metabolism and arousal, hemispheric lateralization (a shift in the relative activity of the two cerebral hemispheres), brain wave resonance and coherence, and a shift in the balance between the activating and quieting components of the autonomic nervous system (Shapiro & Giber, 1978; Walsh, 1979; Shapiro, 1980).

Developmental models that emphasize the emergence of successive stages, states, and capacities may be potentially less reductionistic than those that attempt to view meditation in terms of one or a few underlying mechanisms. From such a perspective, meditation can be viewed as a developmental catalyst, facilitating the correction of incomplete or distorted earlier stages and the emergence of true higher stages (Wilber, 1980; Walsh & Vaughan, 1980b).

Another way in which meditative mechanisms can be viewed is in terms of Tart's (1975) systems model of consciousness. Tart views consciousness as a complex, dynamic system constructed from various components such as thought, emotion, attention, identity, arousal, and so on. Different types of meditation can be viewed as cultivating specific components. While insight meditation specifically trains attention, other types work, for example, with emotion or the sense of identity. Some practices use specific strategies that we would now recognize as counterconditioning and classical conditioning to cultivate love. When this or any other component of consciousness is cultivated to a sufficient degree, it may result in significant shifts in the state of consciousness. Although different practices employ different starting points, it is interesting to note that they all aim for a final common state—enlightenment.

Several non-western psychologies also contain models that attempt to explain how meditative effects are produced. One Buddhist psychological model based on "mental factors" is particularly useful in making comparisons with Western psychotherapeutic practices. Mental factors are qualities or states of mind said to determine the relationship

between consciousness and the object of consciousness (the sensory stimulus of which consciousness is aware). Thus, for example, the mental factor of aversion describes a state in which consciousness tends to withdraw from or avoid a particular stimulus. Buddhist psychology describes some fifty odd mental factors, of which we will examine seven here, the "factors of englightenment." These are seven qualities that are deliberately cultivated by Buddhist meditators, since it is held that when they are cultivated and balanced one with another, they result in an optimal relationship of awareness to each moment of experience (Goldstein, 1976; Walsh, Goleman, Kornfield, Pensa, & Shapiro, 1978; Kornfield, 1980; Walsh & Shapiro, 1983).

The first of these qualities is mindfulness, which is the quality of being aware of the nature of the object of consciousness. Thus, for example, a fantasy is recognized as such, rather than the individual becoming lost in it without recognizing that it is merely a fantasy.

The remaining six mental factors are divided into two groups of three that should be balanced for optimum psychological well-being. The first group is that of essentially energizing or arousal factors, comprising energy, investigation, and rapture. These are balanced by three calming factors—concentration, tranquility, and equanimity. The energy factor refers to the arousal level, which should be balanced between the extremes of agitation and torpor. Investigation refers to the active exploration of the moment-to-moment experience and state of mind, while rapture refers to a positive sense of joy and intense interest in the moment-to-moment experience. The calming factors involve concentration, which is the ability to maintain attention on a specific object; tranquility, which is calm and freedom from anxiety and agitation; and equanimity, which refers to the capacity to experience any sensation without disturbing the mental state.

Western therapists have tended to emphasize the active factors of energy and investigation in psychological exploration. What has not been appreciated is that perceptual and intuitive sensitivity and insight are limited without a complementary development of concentration, tranquility, and equanimity. On the other hand, Eastern traditions have sometimes overemphasized these factors, so that individuals may develop intense concentration and calm without a balanced complementary cultivation of investigation and energetic observation. Such practices lead to euphoric experiences but relatively little deep wisdom or permanent liberation from mental conditioning. Rather, optimal

effects are held to occur when all seven factors are cultivated in a balanced, mutually facilitating manner.

MEDITATION PRACTICE

While the general principles and methods of practice are the same, the intensity and degree of commitment required for a person wishing to use meditation for intensive exploration and growth are far greater than those required of the person who wishes to employ it merely as a self-regulation strategy for a limited psychological or somatic disturbance. The major part of this section will deal with intense practice, since this also encompasses the lesser demands of using meditation as a clinical self-regulation strategy.

For an individual committed to the deepest and most thoroughgoing self-transformation, meditation is best viewed as but one component of a shift in attitudes, thought, speech, and behavior aimed at the deepest possible transformation of mind, awareness, identity, lifestyle, and relationship to the world. Any meditator soon recognizes that while behavior originates from the mind, all behavior also leaves its imprint on the mind and conditions and imprints the state in which it was performed. Training in meditation is therefore usually accompanied by preliminary and concomitant shifts in lifestyle designed to enhance positive mental states and reduce negative ones. Thus, for example, the meditator is advised to be strictly ethical in all behavior. Buddhist psychology recommends, at a minimum, refraining from lying, stealing, sexual misconduct, killing, and the consumption of mind-clouding intoxicants. Traditionally, this is said to lead to what is called "purification," in which unskillful and counterproductive behaviors are gradually winnowed away.

This ethicality is not to be confused with externally imposed or sanctioned moralism, which adopts a judgmental right/wrong, good/bad perspective on behavior. Rather, no meditator can long remain unaware that unethical behavior is motivated by emotions and states such as greed, anger, and aversion, that unethical behavior enhances these states, and that they in turn disrupt the mind, leaving it agitated, guilty, and trapped still more deeply in painful conditioning.

Other useful practices include the cultivation of generosity and service to others as ways of reducing egotistical self-centeredness and

desire. Practitioners may also be drawn to a life of what has been termed "voluntary simplicity" (Elgin, 1981). With deepened practice, meditators recognize the disrupting effects of greed and attachment. At the same time, they find themselves better able to generate a sense of well-being and the positive emotions for which they were formally dependent upon external possessions and stimuli, and they may thus experience less need to own the latest and biggest car, boat, or color television set. Rather, greater pleasure is found in a deepening sensitivity to the moment-to-moment flow of experience, and each moment, no matter what one is doing, becomes a source of rich and multifaceted stimulation.

For most people, meditation is a slow, cumulative process, so that no one should commence it unless he or she is prepared to make a commitment to daily practice for a minimum of about a month. Practice may be begun either with short daily sessions, such as twenty minutes or half an hour once or twice a day, or, for individuals who wish to jump in, with a retreat in which one engages in more or less continuous meditation for a period of days or weeks. The latter is more difficult in that initial intensive practice can often be quite arduous, but it is also more rewarding in that even several days of intensive continuous practice will be sufficient to produce a range of experiences and insights beyond the ken of normal daily life. While it is possible to make some progress unaided, any deep practice is greatly facilitated by a good teacher or guide with considerable personal experience of the discipline.

Meditation practices can be subdivided into two main categories: concentration and awareness. Concentration meditation aims especially at developing the ability of the mind to focus attention imperturbably on specific objects such as the breath, an emotion, or a mental factor. Awareness meditations, on the other hand, aim at examining the nature of mind, consciousness, and the ongoing flux of moment-to-moment experience. Meditations such as transcendental meditation (TM) that focus on a repetitive internally generated sound or thought can be seen as concentration practices; Zen or insight meditations, which ultimately aim to open the individual to an awareness of whatever passes through the field of awareness, can be seen as awareness practices.

In concentration meditation, the individual attempts to fix attention on a specific stimulus, such as the breath. However, attention remains fixed for a remarkably short period, and the individual soon finds him- or herself lost in fantasy, inner dialogue, or unconscious reverie of some type. As soon as this is realized, attention is brought back to the breath

and maintained there until lost again. This rapidly results in a startling and disconcerting recognition: namely, that the degree of awareness and control over attentional processes is far less than we usually recognize. Most beginning meditators are astonished to recognize just how much of their lives and mental processes are on unconscious automatic pilot.

Since the power and extent of this automaticity is so difficult for someone without personal experience of it to understand, it is worthwhile for any nonmeditator to try the following exercise. Set a timer for approximately ten minutes. Take a comfortable seat, close your eyes, and turn your attention to the sensations of breathing in your abdomen. Try to stay with the sensations continuously as the abdominal wall rises and falls, and focus your attention carefully, precisely, and microscopically on the sensations that arise and pass away each instant. Don't let your attention wander for a moment. If thoughts and feelings arise, just let them be there and continue to focus your awareness on the sensations of the breath. While you continue to pay close attention to the sensations, start counting the breaths from ten down to one, and after you reach one, go back to ten again. However, if you lose count or if the mind wanders from the sensations of the breath, even for an instant, go back to ten and start again. If you get lost in fantasy or distracted by internal or external stimuli, just recognize what has happened and gently bring the mind back to the breath and start counting again. Continue this process until the timer tells you to stop, and then estimate how much of the time you were actually fully aware of the experience of breathing.

Most people will find that only a very small percentage of their time was spent fully aware of the sensations of the breath. With continued practice and longer durations, many find that this awareness is even less than they initially thought, since much of the time spent lost in fantasy is not initially recognized. However, this brief exercise should be sufficient to give a slight flavor of the problem. If you have not already done so, please do this exercise before reading further.

With prolonged practice, concentration gradually improves, and meditators are able to maintain their focus for progressively longer periods. As they do so, a number of concomitant experiences occur, such as calm, equanimity, a sense of lightness and well-being, and, ultimately, a range of altered states (Brown, 1977).

Although the practice of concentration can be very useful and pleasurable, some traditions view it more as a facilitator of awareness meditation than as an end in itself. Insight or awareness practices also

aim at directing attention, but allow it to shift to focus electively on whatever is predominant within the field of awareness. Thus the individual practicing insight meditation might begin by focusing attention on the breath, but as other stimuli such as thoughts, sensations, or emotions become predominant, attention is allowed to focus on and examine each of them in succession.

In doing this, the first level of insights that develop are what might be called "psychodynamic." That is, the individual recognizes patterns of thought and behavior such as might be recognized in traditional psychotherapy. However, as the practice deepens, the significantly enhanced capabilities of concentration, calm, and equanimity allow deep insights into the nature of psychological processes. This level of insight brings an illumination of how the mind is constructed. One begins to see, for example, the way a single thought may arise into awareness and modify all perception. The arising of desire may be seen to modify perception and result in the production of a state and motivational system aimed at not only obtaining, but clutching at and resisting detachment from the object of the desire. Simultaneously, associations and fears concerning the possible loss of the object may be observed. One begins to gain insight into the fundamental nature of processes such as motivation, perception, and ego. Everything in the mind is seen to be in constant change, and the illusion that there abides deep within the psyche a permanent unchanging ego or self is seen to be a construction of perceptual insensitivity. With this recognition, there occurs a letting go of egocentric motivation and an enhanced identification with others and the universe at large.

The range of experiences is extraordinarily large and intense, far beyond anything that is experienced in daily life, and suggests that almost any experience may occur in meditation as a result of greater openness and sensitivity (Kornfield, 1979). Indeed, more experienced meditators state that what tends to emerge as one continues to have more and deeper experiences is an underlying calm and nonreactive equanimity, so that this greater range of experiences can be observed and allowed without disturbance, defensiveness, or interference. More and more, the individual identifies him- or herself with the calm observer or witness of these experiences, rather than with the experiences per se (Goldstein, 1976; Ram Dass, 1978).

Many meditators, including behavioral scientists, have reported that as they continued to meditate, they experienced a deepening of their

intellectual understanding of the statements of more advanced practitioners. It therefore appears that intellectual understanding in this area demands an experiential basis and that what is incomprehensible at one stage may subsequently become more understandable once the individual has experienced some of the meditative process.

Occasionally, some of the experiences that occur may be disturbing, such as anxiety, tension, anger, perceptual changes in sense of self and reality (Lazarus, 1976; Kennedy, 1976; Kornfield, 1979; Walsh & Roche, 1979). These may sometimes be quite intense, but generally are shortlived and remit spontaneously. In many cases, they seem to represent a greater sensitivity to, and emergence of, previously repressed psychological memories and conflicts. Thus the initial pain of experiencing them may be a necessary price for processing and discharging them.

For those who wish to learn to meditate, there are several helpful books. Some that beginners may find useful include LeShan (1975), Goldstein (1976), Ram Dass (1978), Shapiro (1978), and Levine (1979). However, books by themselves are rarely enough, and it is extremely helpful to have the support and guidance of a teacher. Meditation teachers and centers can often be found through a perusal of the phone book, particularly for the more popular varieties such as transcendental meditation or Zen. A useful reference list of centers and teachers is contained in the appendix of the book by Ram Dass (1978).

APPLICATIONS OF MEDITATION

The applications of meditation can perhaps be best considered in terms of the levels and degrees of psychological intervention available. One useful division views such interventions in terms of three levels: therapeutic, existential, and soteriological (Wilber, 1977). The therapeutic level is essentially aimed at reducing overt pathology, while the existential aims at confronting the givens of existence, such as responsibility, finitude, death, and so on. The soteriological level is aimed at liberation or enlightenment and, as such, has been little recognized in traditional Western models. "We have on the psychology of liberation—nothing" (Gordon Allport, in J. C. Smith, 1976).

At the therapeutic level, a considerable body of research data is available to suggest that meditation may have a wide range of

application for both psychological and somatic, particularly psychosomatic, disorders. The general picture that is emerging suggests that meditation may enhance psychological well-being and perceptual sensitivity (for extensive reviews, see Shapiro & Giber, 1978; Shapiro, 1980).

Many studies have reported that meditation reduces anxiety, either for nonspecific anxiety and anxiety neurosis (Girodo, 1974; Shapiro, 1976) or for specific phobias such as of enclosed spaces, examinations, being alone, or heart attack (Boudreau, 1972; French & Tupin, 1974). Clinical research has indicated that drug and alcohol abuse may be reduced (Shafii, Lavel, & Jaffe, 1975; Benson, 1969; Benson & Wallace, 1972; Shapiro & Zifferblatt, 1976), while hospitalized psychiatric patients with a variety of disorders may benefit from daily transcendental meditation (Glueck & Stroebel, 1978).

There have also been reports of psychosomatic benefits. Meditation has been employed successfully for rehabilitation after myocardial infarction (Tulpule, 1971), in the treatment of bronchial asthma and insomnia (Honsberger, 1973; Woolfolk, 1975), and in the reduction of blood cholesterol levels and high blood pressure (Datey, Deshmukh, & Dalir, 1969; Benson & Wallace, 1972; Patel, 1975; Stone & DeLeo, 1976).

Positive effects have also been noted in healthy nonclinical populations. A number of studies have suggested that meditators change more than control subjects in the direction of enhanced confidence, self-esteem, sense of self-control, empathy, and self-actualization (Lesh, 1970; Nidich, Seeman, & Dreshin, 1973; Hjelle, 1974).

Although there is little empirical evidence available, a number of teachers have reported sex and cultural differences. Women are said to make more rapid progress than men, and Asians more rapid than Westerners. I interviewed eminent Asian teachers of vipassana meditation who had extensive experience teaching both Asian and Western students, and all of them agreed that Westerners were significantly slower (Walsh, 1981). Among the factors they suggested to account for this were less faith in the practice, the ready availability of sensory distractions and gratifications, sexual preoccupations, difficulty with concentration, intolerance of hardship, insufficient effort, and the tendency to do self-psychotherapy rather than meditation. If these suggestions are correct, they may lend support to the Eastern claim that Western culture and materialism exact a cost on the mind and consciousness.

In summary, then, experimental evidence clearly indicates that meditation may have considerable therapeutic potential. However, few definite claims can be made, and many points remain unclear. For example, many studies have been flawed by methodological problems, such as the lack of adequate control groups, uncertain expectation and placebo effects, and dubious measurement procedures. Furthermore, several recent studies have suggested that meditation may not necessarily be more effective for clinical disorders than are other self-regulation strategies, such as relaxation training and self-hypnosis (Kirsch & Henry, 1979), although, in most cases, the amount of meditation experience that subjects have had is very small by meditative norms. On the other hand, in several studies subjects have reported meditation experiences to be more meaningful, pleasurable, and relaxing than those of other strategies, even where objective measures did not separate them. Patients who are most likely to benefit from meditation are those who are not severely disturbed and who perceive themselves as possessing an internal locus of control.

Experimental measures also indicate greater perceptual sensitivity. Sensory thresholds, the lowest levels at which stimuli can be detected, are lowered (Davidson, Goleman, & Schwartz, 1976), while the capacities for empathy (Lesh, 1970; Leung, 1973) and field independence (Linden, 1973; Pelletier, 1974) are increased. Thus both phenomenological and objective studies agree with classical literature that meditation enhances perceptual sensitivity. A broad range of physiological, chemical, and hormonal effects have also been detected (for reviews, see Walsh, 1979; Shapiro, 1980) but will not be discussed here.

Meditation may also be useful for therapists (Carrington, 1978; Shapiro, 1980). A number of subjective reports and two experimental papers (Lesh, 1970; Leung, 1973) suggest that meditation may enhance empathic sensitivity and accuracy. The deep insights into the workings of one's own mind that meditation provides also seem to allow for insight into, and compassion toward, the painful mental patterns that clients bring to therapy. As in many traditional Western psychotherapies, it is recognized that the meditator's self-insight and wisdom are the limiting factors for successful help to others. Therefore, the meditator is urged to continually deepen his or her own practice as the most effective way of benefiting others.

Finally, meditation is available as a tool for those who wish to plumb the depths of their own being. Here it can be used to explore the nature of mind, identity, and consciousness, to grapple with the deepest questions of existence any human being can confront, and, ultimately, to seek to transcend them all in a radical transformation of consciousness and the

seeker. For such a person, meditation is said to provide a tool that can be used from the beginning to the very end of the quest. Such a path is not for the fainthearted, since the individual must be willing to confront any and every experience the mind can create, and that range is vast indeed.

Although the deepest insights may occur at any moment, such a practice is usually to be reckoned in years rather than in hours or even months. Ramana Maharshi, one of the most respected Hindu teachers in the last century, noted that "mind control is not your birthright. Those who have succeeded owe their liberation to perseverance" (Kornfield, 1977). This recognition prompted Medard Boss (1963), one of the earliest Western psychiatrists to examine meditative practices firsthand, to comment that, compared with the intensity of yogic self-exploration, "even the best Western training analysis is not much more than an introductory course." Coming to full voluntary control of one's own mind has been called the art of arts and the science of sciences. While this has a hyperbolic ring to it, few people who have tried it would probably disagree.

Of course, one does not have to commit *oneself* totally to this path. All of us can explore it as little or as much as we wish and can expect proportionate benefits. Nowhere is the old maxim about getting out of something what you put into it truer than in meditation. Although initially often quite difficult, the practice is both self-reinforcing and self-fulfilling, and the progressive experiences of deepening calm, equanimity, understanding, and compassion may draw one gently and pleasurably into deeper and deeper exploration.

> The thought manifests as the word, the word manifests as the deed.
> The deed develops into habit, and the habit hardens into character.
> So watch the thought and its ways with care
> And let it spring from love born out of respect for all beings.
> For all beings are One.
>
> —Anonymous

PERSONAL EXPERIENCE

The following is a condensed description of the first two years of my own meditative experiences. I am including such an account in the belief that it may give some sense, however partial and inadequate, of the powerful

and personally meaningful nature of the practice. There is a huge gap between a theoretical paper on meditation and the direct experience. It is hoped that such a report by a mental health professional may be of personal interest to readers who are considering the possibility of trying meditation for themselves. A more detailed account of these experiences is available elsewhere (Walsh, 1977, 1978), and for those readers who wish to see a detailed case study of meditation employed for a specific clinical disorder, an excellent account is available in Shapiro (1980).

Because parts of this account describe experiences that occurred during very intensive continuous meditation in retreats, many of the experiences are far more intense and difficult than those usually encountered by people practicing for brief daily periods.

This is an account of the subjective experiences of some two years of vipassana or insight meditation. During the first year this consisted of an average of approximately 1 hour per day, and during the second was increased to about 2 hours, as well as some 6 weeks of intensive meditation retreats, usually of 2 weeks' duration. These retreats consisted of about 18 to 20 hours daily of continuous walking and sitting meditation performed in total silence and without eye contact, reading, or writing. While this amount of practice may be vastly less than that of more experienced practitioners, it has certainly proved sufficient to elicit a range of experiences beyond the ken of day-to-day nonmeditative living.

I began meditation with one-half hour each day, and during the first three to six months there were few times during which I could honestly say with complete certainty that I was definitely experiencing benefits from it. Except for the painfully obvious stiff back and sore knees, the psychological effects other than occasional relaxation were so subtle and ephemeral that I could never be sure that they were more than figments of my wishes and expectations. The nature of meditation seems to be, especially at first, a slow but cumulative process, a fact that may be useful for beginners to know.

However, with continued perseverance, subtle effects just at the limit of my perceptual threshold began to become apparent. I had expected the eruption into awareness of powerful, concrete experiences—if not flashes of lightning and pealing of bells, then at least something of sufficient intensity to make it clear that I had "gotten it," whatever "it" was. What "it" actually turned out to be was not the appearance of formerly nonexistent mental phenomena, but rather a gradual

incremental increase in perceptual sensitivity to the formerly subliminal portions of my own inner stream of consciousness.

"When one sits down with closed eyes to silence the mind, one is at first submerged by a torrent of thoughts—they crop up everywhere like frightened, nay, aggressive rats" (Satprem, 1968, p. 33). The more sensitive I became, the more I was forced to recognize that what I had formerly believed to be my rational mind, preoccupied with cognition, planning, problem solving, and so on, actually comprised a frantic torrent of forceful, demanding, loud, and often unrelated thoughts and fantasies that filled an unbelievable proportion of consciousness even during purposive behavior. The incredible proportion of consciousness that this fantasy world occupied, my powerlessness to remove it for more than a few seconds, and my former state of mindlessness or ignorance of its existence staggered me. Interestingly, this "mindlessness" seemed much more intense and difficult to deal with than in psychotherapy (Walsh, 1976), where the depth and sensitivity of inner awareness seemed less, and where the therapist provided a perceptual focus and was available to pull me back if I started to get lost in fantasy.

The subtlety, complexity, infinite range and number, and entrapping power of the fantasies that the mind creates seems impossible to comprehend, to differentiate from reality while in them, and even more so to describe to one who has not experienced them. Layer upon layer of imagery and quasi-logic open up at any point to which attention is directed. Indeed, it gradually becomes apparent that it is impossible to question and reason one's way out of this all-encompassing fantasy since the very process of questioning, thinking, and seeking only creates further fantasy.

The power and pervasiveness of these inner dialogues and fantasies left me amazed that we could be so unaware of them during our normal waking life and reminded me of the Eastern concept of maya, all-consuming illusion.

The First Meditation Retreat

The first meditation retreat, begun about one year after commencing sitting, was a very painful and difficult two-week affair. A marked hypersensitivity to all stimuli both internal and external rapidly developed, resulting in intense arousal, agitation, discomfort, and multiple chronic muscle contractions, especially around the shoulders.

One of the most amazing rediscoveries during this first retreat was the incredible proportion of time, well over 90%, that I spend lost in

fantasies. Most of these were of the ego self-aggrandizing type, so that when eventually I realized I was in them, it proved quite a struggle to decide to give them up and return to the breath, but with practice this decision became slightly easier, faster, and more automatic. This by no means happened quickly, since over the first four or five days the proportion of time spent in fantasy actually increased as the meditation deepened. During this period, each time I sat and closed my eyes, I would immediately be swept away by vivid hallucinations, losing all contact with where I was or what I was doing, until after an unknown period of time a thought would creep in, such as "Am I really swimming, lying on the beach?" or the like, and then I would either get lost back into the fantasy or another thought would come: "Wait a moment, I thought I was meditating." If the latter, then I would be left with the difficult problem of trying to ground myself, that is, of differentiating between stimulus producing percepts ("reality") and entirely endogenous ones ("hallucinations"). The only way this seemed possible was to try finding the breath, and so I would begin frantically searching around in this hypnagogic universe for the sensations of the breath. Such was the power of the hallucinations that sometimes I would be literally unable to find my breath and would fall back into fantasy. If successful, I would recognize my breath and be reassured that I was in fact meditating. Then, in the next moment, I would be lost again in yet another fantasy.

The clarity, power, persuasiveness, and continuity of these hallucinations are difficult to express adequately. However, the effect of living through three days during which time to close my eyes meant losing contact almost immediately with ordinary reality was extraordinarily draining, to say the least. Interestingly enough, while this experience was uncomfortable and quite beyond my control, it was not particularly frightening—if anything, the opposite. For many years, I had feared losing control if I let down defenses and traveled too far along the road of self-investigation and discovery. This appears to be a common fear in most growth traditions and seems to serve a major defensive function. Having experienced this once-feared outcome, it now no longer seems so terrifying. Of course, the paradox is that what we usually call "control" is actually exactly the opposite, a lack of ability to let go of defenses.

While a good 90% or more of this first retreat was taken up with mindless fantasy and agitation, there did occur during the second week occasional short-lived periods of intense peace and tranquility. These were so satisfying that, while I would not be willing to sign up for a lifetime in a monastery, I could begin to comprehend the possibility of

the truth of the Buddhist saying that "peace is the highest form of happiness." Affective lability was also extreme. I frequently experienced sudden, apparently unprecipitated, wide mood swings to complete polar emotions. Shorn of all my props and distractions, it became clear that I had little more than the faintest inkling of self-control over either thoughts or feelings, and that my mind had a mind of its own. This recognition is commonly described as one of the earliest, strongest, and most surprising insights that confronts people who begin intensive meditation practice, who are always amazed that they had not recognized it previously (Goldstein, 1976).

Attachments and Needs

It soon became apparent that the type of material that forcibly erupted into awareness and disrupted concentration was most often material—ideas, fantasies, thoughts, and so on—to which I was attached (addicted) and around which there was considerable affective charge. There was a definite sense that attachments reduced the flexibility and power of the mind, since whenever I was preoccupied with a stimulus to which I was attracted, I had difficulty in withdrawing my attention from it to observe other stimuli that passed through awareness.

Paradoxically, it seems that a need or attachment to be rid of a certain experience or state may lead to its perpetuation. The clearest example of this has been with anxiety. Some months ago, I suddenly began to experience mild anxiety attacks of unknown origin, which curiously enough seemed to occur most often when I was feeling really good and in the presence of a particular person who I loved. At such times, I would try all my various psychological gymnastics to eradicate it, since it was clearly not okay with me to feel anxious. However, these episodes continued for some five months in spite of, or, as it actually turned out, because of my resistance to them. During this time my practice deepened, and I was able to examine more and more of the process during meditation. What I found was that I had considerable fear of fear, and my mind therefore surveyed in a radarlike fashion all endogenous and exogenous stimuli for their fear-evoking potential and all reactions for any fear component. Thus there was a continuous mental radarlike scanning process preset in an exquisitely sensitive fashion for the detection of anything resembling fear. Consequently, there were a considerable number of false positives, that is, nonfearful stimuli and

reactions that were interpreted as fearful or potentially fear provoking. Since the reactions to the false positives themselves comprised fear and fear components, there was of course an immediate chain reaction set up, with one fear response acting as stimulus for the next. It thus became very clear that my fear of and resistance to fear was exactly what was perpetuating it.

This insight and the further application of meditative awareness to the process certainly reduced but did not eradicate these episodes entirely. Paradoxically, they still tended to recur when I felt very calm and peaceful. It was not until the middle of the next meditation retreat that the reasons for this became clear. After the first few days of pain and agitation, I began to feel more and more peaceful, and there came a sitting in which I could feel my meditation deepening perceptibly and the restless mental scanning slowing more and more. Then, as the process continued to deepen and slow, I was literally jolted by a flash of agitation and anxiety accompanying a thought—"But what do I do now if there's no more anxiety to look for?" It was apparent that if I continued, there would be neither anxiety to scan for nor a scanning process itself, and my need to get rid of anxiety demanded that I have a continuous scanning mechanism, and the presence of the mechanism in turn created the presence of anxiety. My "But what do I do now?" fear had very effectively removed the possibility of the dissipation of both, and its occurrence at a time when I was feeling most peaceful, relaxed, and safe of course explained why I had been subject to these anxiety episodes at the apparently paradoxical times when I felt best. Paradoxically, then, it appears that within the mind, if you need to be rid of certain experiences, then not only are you likely to experience a number of false positives, but you may also need to have them around continuously so you can keep getting rid of them. Thus, within the province of the mind, what you resist is what you get.

Perception

With continued practice, the speed, power, loudness, and continuity of thoughts and fantasies began to diminish slowly, leaving subtle sensations of greater peace and quiet. After a period of about four or five months, there occurred episodes in which I would open my eyes at the end of meditation and look at the outside world without the presence of concomitant internal dialogue. This state would be rapidly terminated

by a rising sense of anxiety and anomie accompanied by the thought "I don't know what anything means." Thus I could be looking at something completely familiar, such as a tree, a building, or the sky, and yet without an accompanying internal dialogue to label and categorize it, it felt totally strange and devoid of meaning. It seems that what made something familiar, and hence secure, was not simply its recognition, but the actual cognitive process of matching, categorizing, and labeling it, and that once this was done, more attention and reactivity was focused on the label and labeling process than on the stimulus itself. Thus the initial fantasy and thought-free periods may feel both strange and distinctly unpleasant, so that we are at first punished by their unfamiliarity. We have created an unseen prison for ourselves, in which the bars are made up of thoughts and fantasies of which we remain largely unaware unless we undertake intensive perceptual training. Moreover, if they are removed, we may be frightened by the unfamiliarity of the experience and rapidly reinstate them. "We uphold the world with our internal dialogue" (Castaneda, 1974).

Presumably, this labeling process must modify our perception in many ways, including reducing our ability to experience each stimulus fully, richly, and newly, by reducing its multidimensional nature into a lesser dimensional cognitive labeling framework. This must necessarily derive from the past, be less tolerant of ambiguity, less here and now, and perpetuative of a sense of sameness and continuity of the world. This process may represent the phenomenological and cognitive meditational basis of Deikman's (1966) concept of automatization and Don Juan's "maintaining the world as we know it" (Castaneda, 1971, 1974).

Interestingly, the extent of reaction to the stimulus itself as opposed to the label seems to be a direct function of the degree of mindfulness or meditative awareness. If I am mindful, then I tend to be focused on the primary sensations themselves, to label less, and to react to these labels less. For example, there was a period of about six weeks during which I felt mildly depressed. I was not incapacitated, but was uncomfortable, dysphoric, and confused about what was happening to me throughout most of the waking day. However, during daily meditation, this experience and its affective quality changed markedly. The experience then felt somewhat like being on sensory overload, with many vague, ill-defined somatic sensations and a large number of rapidly appearing and disappearing unclear visual images. However, to my surprise, nowhere could I find stimuli that were actually painful. Rather, there

was just a large input of vague stimuli of uncertain significance and meaning. I would therefore emerge from each sitting with the recognition that I was actually not experiencing any pain and feeling considerably better. This is analogous to Tarthang Tulku's (1974) statement that "the more you go into the disturbance—when you really get there—the emotional characteristics no longer exist."

However, within a very short time I would lapse once more into my habitual nonmindful state, and when I next became mindful, once again I would find that I had been automatically labeling the stimulus complex as depression and then reacting to this label with thoughts and such feelings as "I'm depressed; I feel awful; what have I done to deserve this?" and so on. A couple of moments of relaxed mindfulness would be sufficient to switch the focus back to the primary sensations and the recognition once again that I was actually not experiencing discomfort. This process repeated itself endlessly during each day. This effect of mindfulness or phenomenology and reactivity should lend itself to experimental neurophysiological investigation. It is also an interesting example of one difference in the therapeutic processes of meditation and traditional Western therapies. Where the latter attempt to change the content of experience, meditation is also interested in changing the perceptual-cognitive processes by which the mind produces such experiences.

Perceptual Sensitivity

One of the most fundamental changes has been an increase in perceptual sensitivity, which seems to include both absolute and discrimination thresholds. Examples of this include both a more subtle awareness of previously known precepts and a novel identification of previously unrecognized phenomena.

Sensitivity and clarity frequently seem enhanced following a meditation sitting or retreat. Thus, for example, at these times it seems that I can discriminate visual forms and outlines more clearly. It also feels as though empathy is significantly increased and that I am more aware of other people's subtle behaviors, vocal intonations, and the like, as well as my own affective responses to them. The experience feels like having a faint but discernible veil removed from my eyes, and that the veil is made up of hundreds of subtle thoughts and feelings. Each one of these thoughts and feelings seems to act as a competing stimulus or "noise" that thus reduces sensitivity to any one object. Thus, after medita-

tion, any specific stimulus appears stronger and clearer, presumably because the signal:noise ratio is increased. These observations provide a phenomenological basis and possible perceptual mechanism to explain the findings that meditators in general tend to exhibit heightened perceptual sensitivity and empathy.

One unexpected demonstration of greater sensitivity has been the occurrence of the synesthetic perception of thoughts. Synesthesia, or cross-modality perception, is the phenomenon in which stimulation of one sensory modality is perceived in several, as, for example, when sound is seen and felt as well as heard (Marks, 1975). Following the enhanced perceptual sensitivity that occurred during my prior psychotherapy, I began to experience this phenomenon frequently, suggesting that it may well occur within all of us, although usually below our thresholds (Walsh, 1976). Now during moments of greater meditative sensitivity, I have begun to experience this cross-modality perception with purely mental stimuli, such as thoughts. Thus, for example, I may initially experience a thought as a feeling and subsequently become aware of a visual image before finally recognizing the more familiar cognitive information components.

Another novel type of perception seems to have occurred with continued practice, since I have begun to find myself gradually able to recognize increasingly subtle mental phenomena when I am not meditating, but rather when I am involved in my daily activity. This has resulted in an increased recognition of affects, motivations, and subtle defensive maneuvers and manipulations. Indeed, these latter recognitions seem to now constitute the sensitivity-limiting factor, since the discomfort that attends their more frequent perception is often sufficient to result in a defensive contraction of awareness.

Trust and Surrender

These experiences have led to a greater understanding of and willingness to surrender to the meditative process. In the West, surrendering has connotations of succumbing or being overwhelmed, but here it is employed more in line with its use in the meditative traditions. Thus with increasing experience I have begun to surrender to the process in the sense of trusting, following, and allowing it to unfold without attempting to change, coerce, or manipulate it and without necessarily requiring prior understanding of what I may be about to go through or predicting the outcome. Thus, for example, one of my major

fears has been that of losing control, intellectual skills, and scientific capacities. This seems reminiscent of Fadiman's (1977) statement that one of the major barriers to moving on to the next level is always the fear of losing what we have.

Thus, although I need to make it very clear that this surrender is far from complete for me, it has come a long way since I first began. The experiences that seem to have contributed to this are as follows. First of all, to the best of my knowledge, the feared catastrophies have not happened. For example, my intellectual and scientific skills seem to have remained intact. In addition, meditation seems to have provided a range of experiences, insights, and developments formerly totally unknown to me, and I have been forced to give up expecting new experiences to be merely extensions of what I already know. As both Bugental (1965) and Rajneesh (1975) have stated, growth is always a voyage into the unknown.

Furthermore, it now seems clear to me that it is most effective to allow experiences to be as they are and to experience them without forcibly trying to change them. This is especially true when viewed with the recognition that any experience can be used for growth, even to the point of perceiving the experience as necessary and perfect for the process. Indeed, recognizing the perfection and functionality of each experience appears to be a highly productive perspective for several reasons. First, it reduces the deleterious agitation, resistance, and eruption of defenses and manipulations that result from judgment and negative perspectives. Second, contrary to my previous beliefs, acceptance and a nonjudgmental attitude toward an experience or situation does not necessarily remove either the motivation or capacity to deal with it in the most effective manner. Thus my prior beliefs were that I *needed* my judgments, aversions, and negative reactions in order to power my motivation to modify the situations and stimuli eliciting them. It should be noted here that the experience of perfection is just that, an experience, which may say more about the psychological state of the individual perceiving it than about the stimulus per se, and may not necessarily in any way vitiate the perceiver's perception of the need to modify it. Finally, I have come to recognize that the great meditation teachers really knew what they were talking about. Time and time again, I have read descriptions, explanations, and predictions about meditation, the normal psychological state, the states that arise with more and more meditation, latent capacities, and on and on, and have scoffed and argued against them, feeling that they were just so removed from my

prior experience and beliefs that they could not possibly be true. However, by now I have had a variety of experiences that I formerly would have believed to be impossible, and have gained the experiential background with which to understand more of what is being taught. I now have to acknowledge that these people know a great deal more than I do and that it is certainly worth my while to pay careful attention to their suggestions. Experiential knowledge may be essential for intellectual understanding of psychological processes and consciousness, and, unfortunately, even highly intellectually sophisticated nonpractitioners may not be able to understand such phenomena fully. My experiences may not be able to understand such phenomena fully. My experiences lead me to believe that the scope of mind, its range and depth of experience, its capacities for producing encompassing and absorbing illusions, which we take for reality, the extent to which it is usually out of our control, and its nature and potentials when fully trained may not only be more than we believe, but also more than we *can* believe.

CONCLUSION

For over 3000 years, it has been claimed that meditation is a powerful tool available for everyone for the exploration of mind, consciousness, and "self." Moreover, it is claimed that this tool, if used wisely and sufficiently, enables one to reach the very highest states of consciousness and levels of self-actualization and self-transcendence. These are extraordinary claims, and presumably no therapeutic tool could promise more. Are these claims valid? All meditation traditions are unanimous in agreeing that no amount of words can ever fully answer this question and that the only true test is personal experience. The words spoken a thousand years ago by an ancient Tibetan master still apply:

> To see if this be true, look within your own mind.

Or, in the words of Plotinus:

> We must close our eyes and evoke a new manner of seeing,
> a wakefulness that is the birthright of us all,
> though few put it to use.

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