MEDITATION: ASPECTS OF RESEARCH AND PRACTICE

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This is the edited transcription of a discussion presented at the Sixth Annual Conference of the Association for Transpersonal Psychology, Asilomar Conference Grounds, Pacific Grove, California, September 12, 1978. The panel was organized and coordinated by Roger N. Walsh.—Editor

Roger N. Walsh: Several of us on this panel were at a threemonth meditation retreat last year. As some of you may know, certain things suddenly become incredibly important during meditation retreats, such as whether there might be nuts, or an extra banana at tea time. About the second month of this retreat it became very significant to me that there had never been a panel on meditation at the Association's Annual Conference. I fantasized grandiosely about this panel and after a couple of weeks of going crazy with this, my retreat roommate, Corrado Pensa, who is here today, came up to me. We had been in total silence for two months, not even making eye contact, but having a very beautiful time together and feeling very good. He said, "I'm going to go today (he was leaving the retreat early), and I'd like to speak with you." I said, "Oh, great," and we broke silence for a few minutes. He said, "You know, I've had this thought that we should have a panel on meditation at Asilomar." Hence this panel came into being.

The teacher there at Barre, Massachusetts, was Jack Kornfield. Jack is a psychologist who has done several years of intensive meditation in Southeast Asia and is the author of the book. Living Buddhist Masters (1977). Corrado Pensa is a Professor of Eastern Religions and Philosophies at the University of Rome, and has spent a considerable amount of time in Vipassana practice in America and in Europe. Daniel Goleman is one of the pioneers in mapping meditation. A number of years ago Dan began practicing seriously and wrote some of the first contemporary conceptualizations of the stages and paths of meditation (Goleman, 1971, 1972). Deane Shapiro is the 1978 chairman of the psychotherapy division of the Association. His book, *Precision Nirvana* (1978), with the exquisite subtitle, "The care and maintenance of the mind: An owner's manual," just came out. He is also editing a volume for Aldine Press on meditation and meditation research.

meditation and graduate training Daniel Goleman: When I was a graduate student in Clinical Psychology at Harvard, I began to meditate quite on the side. The clinical program was hard-nosed, psychoanalytic, and research oriented. My meditation was something I mostly kept to myself. However, once I happened to mention the fact that I meditated to a professor of mine. He was teaching a course on clinical diagnosis and said "Meditation? What do you actually do?" At that time I was doing a mantra meditation, and I said, "I repeat this sound to myself in my mind." He said, "Ah ha! It sounds like an obsessive defense to me." I went back into the closet for a good many years after that. But a few years later I went to India and studied meditation even more intensively, simply because it felt very good. I was struck by the fact that what we were trying to do as therapists seemed to be similar, i.e., making people feel good in the same way. Obviously it's more complex than that. But I felt that there must be some way of bringing together what I was experiencing with what I was about in my professional life.

When I got back from India I had to write a dissertation. I thought I'd do it on meditation and I looked around for some way to approach the subject in an academic framework, in a way that would be acceptable as a dissertation. I turned to a body of research that was very accepted in the clinical area, stress reactivity. I plugged in "meditation" where other variables have been tried. For example, there is a famous series of experiments done at Berkeley by Lazarus (1966) where they showed these ghastly films of aboriginal circumcision rites. The researchers prepared people with different cognitive sets. Their instructions were to the effect, "You're about to see this movie and such-and-such will happen. Don't worry, it's not so bad after all." That was one cognitive set. The other instructions indicated that this perfectly abominable thing is going to happen. It's going to frighten you, but that's okay because this is science." Instead of manipulating cognitive sets, I had people meditate and then see a stressful film about shop accidents. I had to have people meditate in a psycho-physiology laboratory where they were hooked up to a polygraph while they saw a film because I was trying to sell meditation to science. I had to find a way of getting a foot in the door.

The experience of meditation, especially for the first time, on the thirteenth floor of William James Hall at Harvard University with all these wires attached to the person who is hearing someone tell him, "Now say 'Ram'," isn't quite the optimal way to begin meditation. But at that point of the game, it seemed all I could do. Apart from the question of whether this is a worthwhile route, I became interested in the question of how to do it more elegantly. That is, if meditation is to be studied through a Western lens, what's the best and most informed vision one can have?

I started to reflect that the emerging Western literature on meditation captured just a small part of the whole process. Keith Wallace and Herbert Benson's work (1972) on TM and lowered metabolical arousal is an example. They found that if you meditate you get into a "hypometabolic state." That's not really news to a meditator but it is news to a cardiologist. That fact is worthwhile to people who don't know anything about meditation. But if you're involved in meditation practice yourself you know that the experience is much richer than any such studies in the Western science paradigm have captured.

I think that the two approaches, East and West, can converge, but we're a long way from it. To come anywhere near the complexities and richness of the meditative experience requires a method that we haven't yet approached, a method

meditation through a Western lens developing a theoretical point

view

at the root of science: the generation of grounded theory. Grounded theory means having both a theoretical perspective on the process and data that refines and modifies that theory. Take, for example, Pavlov in his laboratory. He rings the bell to feed his dogs and suddenly sees that the dogs are salivating before the food comes. He thinks, "What is happening?" He then takes the phenomena as it is, generates a hypothesis about it, and tests the hypothesis. He refines it to a more accurate theoretical understanding which is rooted in both the experience itself, his ideas about the experience, and his test of his ideas. This in turn generates further ideas and tests, and so on. This is the process that all science goes through. We haven't done it with meditation. No study that I know of really has a theoretical point of view. In the laboratory we are the six blind men and the elephant. We're looking at different aspects of meditation, different EEG phenomena, different metabolic epiphenomena of meditation, etc. We haven't really begun to put it together.

I think the most worthwhile avenue of approach for people who want to study meditation scientifically would be to go back to the old sciences. There are many theories of what meditation is and does in the classical spiritual literature. There are esoteric psychologies at the root of every major religious tradition such as Sufism in Islam, or Abhidharma in Buddhism. The one I know best is Abhidharma, a classic Buddhist psychology which is a very sophisticated phenomenology of the mind. It is one that appeals to me as a source of guidance for research. Simplifying for the moment, it says that the normal person's mind is deranged. These Buddhist "scholars" were meditating monks who over several centuries looked into the nature of the mind and almost compulsively catalogued 56 or so mental factors which combine to color a person's psychological state at any given moment. They said there are 14 or so "unhealthy" mental factors such as agitation, or attachment, greed, etc. These are opposed with 14 healthy mental factors (Goleman, 1975). The dynamic between these is the principle which today we call reciprocal inhibition. As you know, behavior therapy is based on the fact that you cannot be tense and relaxed at the same moment. Each of these two states reciprocally inhibits the other; when one is present the other cannot be. What the Buddhist scholars did was to counterpose the 14 healthy factors in a psychological version of the same physiological law. They went on to say it is really much better to experience mostly or entirely healthy factors rather than unhealthy factors—and then told exactly how to do it. They described in great detail two avenues of meditation, the concentrative and insight. Abhidharma literature describes precisely how one progresses along these paths; the mental factors arrange themselves in certain ways.

This is a phenomenological statement of what happens in the mind during meditation. But it can be readily translated into say, propositions about limbic system activity, because the mental factors of agitation and worry are clearly the phenomenological equivalent of what happens in the nervous system of an anxious person. Abhidharma offers similar statements about mentals factors that suggest testable hypotheses. Psychologists love such operational hypotheses. They can go about concocting tests and perhaps even come to predict key transitions in meditation. There is a very detailed array of working hypotheses available in the Abhidharma, as well as in other Eastern psychologies. Plentiful hypotheses are available about the altered states that one achieves during meditation, and, more interestingly for me, about altered traits that result from meditation. It's all predicted in incredible detail in the Abhidharma. We haven't used a template like this to guide meditation research and unless we do it's the blind leading the blind.

hypotheses about altered states and altered traits

Audience: What are some references for the Abhidharma?

Daniel Goleman: The aspect of the Abhidharma that deals specifically with meditation was set down in the 5th century A.D. in a work called the Visuddhimagga. It is available in English translation in paperback from Shambhala Books under the title The Path of Purification. In the 5th century it was a text recited by memory; in an English translation it's about 800 pages. There's much repetition, though it has many delightful stories. If you want working hypotheses, you'll have to dig for them. But it's all there. I summarized it somewhat in a book, The Varieties of the Meditative Experience (Goleman, 1977). This is a "Reader's Digest" version of the Visuddhimagga. You might use the first section of my book as a guide to the Visuddhimagga.

Audience: Would you comment on the value of meditation research for personal practice?

Daniel Goleman: There are different opinions. My sense of its value is not in terms of one's own practice. You should probably ignore everything about meditation that comes out of a laboratory. It's beside the point, especially insofar as it sets up in you an expectation as to what should happen. Then you "go on trips" like "Is my heart beat slowing down...," which is no help to you at all. In fact, it interferes with the process. I also

ddhide to ation doubt the value of research as a way to enrich our understanding of how one ought to go about meditating. I think the methods of meditation have been well worked out for centuries; all we have to do is the practice.

benefits of meditation research As for the impact of meditation research on this culture, I think it is extremely important because for the most part the gods are dead, except for scientific ones. In our rational culture it's important to hear that a Harvard psychologist in a laboratory did tests of meditators and learned such-and-such because that makes meditation real and acceptable. And hopefully it opens people to the practice. Meditation research can also have a number of other benefits for the culture, such as revealing medical applications, or legitimizing the use of meditation in the context of therapies. These are matters of the packaging, or "transmission," to use a nicer, older word, of meditation to this culture.

Roger N. Walsh: Thank you. I would like to point out that Dan himself has done a nice job of legitimization by means of his own research and writing.

Corrado Pensa: I would like to make a few remarks about chains, or successions of negative feelings, in meditation and more specifically, about the relationship of chains of negative feelings with attention. I'm referring to the experience of Vipassana meditation which is based on attention or awareness. When I say chain of negative feelings I mean, for example, starting from anger and going to boredom and from these to anxiety and so on. It's a chain that sometimes seems never to stop. How does attention affect this process? Attention can be either effortful or effortless, forced or spontaneous, and can be termed Attention 1 and Attention 2. The difference between them is like the difference between wanting to be attentive and being attentive. Attention 1 is a thought, "I must be attentive."

There is a wide gap between these two. As a thought, and not a very inspiring one, "I must be attentive" is easily swallowed by other stronger thoughts or feelings. Attention 2, however, being basically a feeling, and a strong one, easily overwhelms other feelings, and even more so, thoughts. My experience is that Attention 1 doesn't affect negative chains, whereas Attention 2 does. I call awareness, or Attention 2, a feeling. This may be inappropriate since awareness includes all feelings, and transcends them. It's like an open structure and all the feelings go through it. But if we define it as an open structure, we miss its other aspect, because when awareness is firmly

implanted it has a thickness, or one might say a quality, or a flavor to it. It affects one's body, one feels lighter, for instance. Attention 2 or awareness is a more powerful feeling that comes among other feelings, including negative ones. It is as though a new guest has come and he has more authority; he has calmness and he is silent—attention doesn't speak; he is not judgmental, because attention doesn't pass judgment. The other guests are noisy, but in the presence of this new one they slow down, or they may even subside, or sometimes even disappear completely. In this latter case we would have objectless awareness, and it is said that if you steadily keep to it, you are well on your way.

Looking more closely at chains of negative feelings, are there weaker links in the chain where attention or awareness can break through? Are there negative feelings which are, so to speak, more transparent to attention or awareness? I have found that mild melancholy states are very interesting in this regard. Melancholy is not usually a talkative verbose feeling; it's bittersweet, with few words and images. In this respect it can be somehow similar to attention or awareness which is without words or images. And attention or awareness can blend and be elicited more easily with melancholy, than with say irritation, with which there are many words and many images. Also mild melancholy is very different from depression which is a fixation, very distracting, and certainly not a good trigger for attention. It should be pointed out that melancholy is not an absence of energy, and not a low energy either. It's rather a different kind of energy, not an organizing but a receptive energy, capable of depth-a very delicate energy. Now, it seems to me that if during a melancholy state you can, so to speak, set aside the ego a little bit—and the only way to do this is just to be acutely aware of it—what is left is a receptive mode and a certain amount of nonattachment, which is close to what awareness is. Therefore attention and melancholy can more easily blend. What is important in practice is that after awareness or Attention 2 has firmly planted itself through the medium of melancholy, this medium is transcended, and there is only awareness. One wonders whether this relationship between melancholy and awareness could be one of the reasons why William James points out that melancholy is very important in religious life.

Now sometimes these successions of negatives stop and what is left is not a peaceful place, not a euphoric place, but something I would call cold silence. It's like a constriction, a cold flame burning where you feel warmth when you experience love. It's nameless, basic, no words, no images. There's very little per-

mild melancholy and attention

negative

feelings

meditation

using negative feelings sonal noise; it's a very impersonal feeling—not transpersonal, but impersonal. If you can stand it, attention can, after a while, blend with it because there is some common ground between the two. If awareness can take roots, then you can transcend this state also. This may be what the Buddhists call basic craving/fear, basic thirst, the bottom of Samsara so to speak. Or from a psychoanalytic view, this might be the cover rather than the bottom. In this case it would be nameless because one wants to erase the names, but if you push the right button, specific anxieties would come out. However, it is not important in terms of practice what view is taken. It is the use of the negative to get to the positive that is useful.

Audience: How do you hunt for the weak links?

Pensa: My understanding is that one should not hunt for weaker links. In this kind of meditation, you try not to identify with any emotion, thought or feeling, including melancholy of course. But if you try disidentification with melancholy, and it persists, then you have to go through it.

Walsh: Thank you Corrado. Our next speaker is Jack Kornfield, director of the Insight Meditation Center where Corrado and I have been meditating.

self and the fundamental illusion

Jack Kornfield: One articulation of the purpose of spiritual practice and a viewpoint that is a product of it as well, is to come to understand that we don't exist. We don't exist in the way we usually think we do as some solid unchanging entity somehow separate from the world and the changing flow of the universe around us. We are caught in a fundamental illusion that there is a separate solid unchanging self, which we have to protect, and defend, and which on some level we think won't really die. This illusion is the major underlying cause of problems of tension, of sorrow and unhappiness in life. To dissolve this view, to come to some disillusion of self, which is not just intellectual, or a religious belief structure ("It's all one," etc.) but is an integrated and deep experience of the fact that we are not, can uproot the difficulties that psychotherapy would like to solve. This is also the essence of religion. To say we do not exist as a separate entity can also be said in other language: that we are everything, that there is no way to set a boundary to what we are and others are not.

There are two levels of understanding meditation practice and spiritual practice that have been discussed so far. One addresses this most fundamental question of who we are in the world, our view of ourselves in relation to life and changing experience. The other addresses the kind of byproducts that happen in meditation or spiritual processes. These may be more related to familiar realms of psychotherapy.

As Daniel Goleman said, there are several major categories of meditation. The two most fundamental distinctions in meditation are concentration and insight. Concentration meditation is an entire range or class of meditations in which the emphasis is to train the mind by focusing it fixedly on a particular object. Concentration means to focus on the breath, a mantra, a candle flame, and so forth in such a way that it excludes other distractions, other thoughts and inputs. The mind, being energy, can be concentrated in the same way a laser can concentrate light energy. The power of concentration can serve to transcend, or to attain a whole range of states of mind that are altered, or of different perceptions from normal ones. They are often quite blissful in that they are undisturbed, or peaceful or tranquil. In addition to providing access to many altered states, the power of concentration can also be applied to the dissection of ourselves, our experiences, and to the understanding of what makes up our world of consciousness and experience.

Awareness-training, the other major class of meditation, doesn't attempt to take the mind away from ongoing experience to focus it on a single object to create different states. Rather it works with present experience, cultivating awareness and attention to the moment-to-moment flow of what make up our life—sight, sound, taste, smell, thought, and feelings. It uses them as the meditation object, as a way to see who we are. In the process of awareness-training meditators also begin to answer the questions about how negative states arise and how to work with them in our own minds and experience. Later, when awareness becomes well developed they can gain access to other levels of experience that transcend our normal daily consciousness.

Meditation which involves devotion or surrender can also be assigned to this second class, because to pay attention carefully is itself a devotional practice. It is a surrender to what is actually happening in each moment without trying to alter or change or put a conceptual framework around it. In that attentive meditation, the second class, one works with a realm of experiencing that lies between the suppression of feelings, impulses, and ideas—not pushing them aside at all—and the other extreme of necessarily acting on them. This cultivates a state of mind which allows us to be open, to observe and experience fully the entire range of mental and physical reality

concentration training of the mind

awareness training of the mind without either suppressing it or acting it out. Through the procedure of paying attention, greater awareness, concentration and new understanding can gradually develop.

the factors of enlightenment I'd like to present a model which comes from the Abhidharma, Buddhist psychology. It is called the Factors of Enlightenment and may be helpful in understanding the way meditation works. The Factors of Enlightenment are seven qualities of mind described in the traditional literature (Buddhaghosa, 1976), which are the definition of a healthy or enlightened mind. They are cultivated to become present in such a way that they determine one's relationship to each moment of experience. Mindfulness, central to the seven qualities, is followed by two groups of factors which must be in balance. The first group includes energy, investigation and rapture; the second set of factors is concentration, tranquility and equanimity. The first three comprise a very active quality of mind. Here energy means the effort to stay conscious or aware; investigation means looking very deeply at experience exploring the process of ourselves, while rapture means joy and interest in the mind. These three must be balanced with concentration, tranquility and equanimity. Concentration is one-pointedness, stillness, the ability to focus the mind in a powerful way; tranquility is an inner kind of silence, a silent investigation rather than thought-filled; equanimity is calm balance in relation to the changing circumstance of experience. Mindfulness when cultivated becomes the cause for the arising of all these seven qualities. It's the key meditation factor that develops the others and brings them into balance.

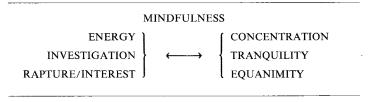


FIGURE 1. THE FACTORS OF ENLIGHTENMENT

In Western Psychology there is much emphasis on the active factors which include investigation and energy devoted to understanding of one's self. But the West has unfortunately lacked an understanding of the importance of the complementary factors of concentration and tranquility. Without cultivating concentration and tranquility, the mind's power is limited and the range of understanding that is available is

rather small in scope. Conversely there is often difficulty in Eastern traditions because of too much emphasis on concentration and tranquility. They may lead to wonderful experiences of rapture, silence of mind, and trance or Jhanna states. But without the balance of investigation, and energetic observation of how things really are, such practice will not lead to a deeper understanding of self and the freedom of enlightenment.

To understand ourselves in practice is to employ the tools of focusing and concentrating the mind and then to apply them with awareness and investigation. What's interesting about this model is that it doesn't take a specific form—Sufi, Buddhist, Hindu, or Psychotherapeutic. As it said in *The Lazy Man's Guide to Enlightenment* (Golas, 1972), "enlightenment doesn't care how you get there." Any method that will cultivate these qualities of mind and bring them into balance is good. Whatever techniques can bring you to a place of stillness, clarity, and openness will lead to a direct understanding of the basic spiritual truths. The true nature of ourself is always here to view if we cultivate our ability to see.

When we understand spiritual practice as simply the cultivation of certain mental qualities, we can understand a wide range of seemingly diverse traditions. Understanding the factors of mind eliminates the necessity of getting caught up in which lama or swami says what, or what kind of costume they wear when they teach.

the
cultivation
of
mental
qualities

I'll tell a short story to illustrate this. I went to my teacher during the early part of my stay in one forest monastery where I lived for a long time. I said to him, "I'm leaving. I'm having a hard time meditating" (as most people do in the beginning). Being angry, I felt that the other monks there weren't practicing the way I thought they should. I said, "I think I'm going to go to a Burmese monastery instead of a Thai one. I like Burma better. Besides, you're not so enlightened; I can tell because every few days you say something, then a few days later you say something that's entirely different."

After he laughed, he answered in this way. "It is like this," he said. "There is a road which I know well. To many it is a bit dark and unfamiliar. If, when I look down the road I see one of my students about to fall in the ditch on the right hand side or to wander off in a small sidetrack to the right, I call to him, 'go left, go left.' If later he or another student is about to fall in the ditch on the left hand side or get lost in a sidetrack to the left, I call again, 'go right, go right.' When I teach, that is really all I

do. Whatever you're attached to on one side or the other, let go of that. Your practice is to come back to a balanced awareness of just what is happening in each moment. This awareness will develop both the elements of concentration and the stability of mind that let you see more deeply than the normal flood of thoughts and movement can allow. At the same time it can incorporate that investigation, that 'seeing for ourselves' that is necessary in practice."

study concentration and awareness practice My doctoral dissertation (1976) was a phenomenological study of what happens to a person's experience in the course of both concentration and awareness practice. There seem to be several levels of development that people go through and many ways to describe these levels. At the first level people simply realize how asleep they are, which is one of the most important insights of all. In trying to pay attention to themselves and be present as much as possible all day long, people become astonished by how much of the time they spend on automatic pilot. This insight begins to change people as they see the benefits of real wakefulness. It gives them a greater motivation in practice, and opens them up to look more realistically at how they view themselves in their world.

The second level of insights are what I would call psychodynamic or personality revelations. People begin to see more clearly patterns to their motivations and behavior. So one might see. . . for example, "My, I notice as I pay attention that I relate in a certain way to people because I am always looking for approval" or "I'm always trying to look good," or "I'm always afraid of that," etc. There's a kind of illumination in the meditation awareness process that's very much like doing therapy for oneself, simply by listening and paying attention. These insights and the acceptance that comes with a nonjudgmental awareness of our patterns promotes mental balance and understanding, so it can lessen our neurotic identification and suffering.

Beyond psychological insight in practice there are levels which are often talked about in the Eastern classical literature. Some of these are levels of the different trance or Jhanna states, very high levels of absorption or concentration. These concentration states have the drawback of leading primarily to altered state changes but not necessarily to fundamental long-term trait changes. A second array of experiences beyond the psychodynamic and awareness of personality level is a progression of insights discussed in the Tibetan tradition through the three yanas of understanding, or in the Theravadin tradition as the progress of insight. This level of awareness brings an illumination of how the mind is constructed. One begins to see how the whole process of desire and motivation works in the mind, quite apart from the content of any particular desire. Further insights into the process of mind lead to seeing more deeply that everything we are is in constant change. There can arise a clear vision of the dissolution of self from moment to moment, and this often leads to a realm of fear and terror, and a kind of inner death. Later there arises from this awareness a spontaneous process of letting go of personal motivation, and with this grows an awareness of loving or 'Bodhisattva' consciousness. As the solidity of the self breaks down, there is a vision of the true connection between all of us. From this arises a spontaneous kind of warmth and compassion. Greater understanding leads to all kinds of altruistic states and eventually the highest kinds of enlightenment, in which we can see our existence as a play in the energy field that is the whole world.

In order to understand this wide range of meditation experience our meditation research must examine the various traditions and techniques from the point of view of how they are simply means to effect changes in arrays of our mental factors. Each technique alters the way that we relate to our experiences and if we look, very different practices and traditions often work to cultivate inwardly the same qualities, such as concentration, tranquility or greater awareness and balance. In particular, the seven factors of enlightenment can then also be seen as simply another model or description of mind coming into balance so that it can see more clearly the nature of our experience.

To illustrate this point let us consider the Zen tradition. The two most common meditative strategies used come from the Soto and the Rinzai approaches. In the Soto tradition it is said that enlightenment exists for us here already. True enlightenment is what is, right now, and any desire to get anywhere or change anything or be anywhere different takes one away from the experience of the mystery of this moment and this reality. So the Soto tradition stresses awareness and surrender in the moment. In the Rinzai tradition they use koans and sticks to hit you. These Zen masters set up enlightenment as a goal or state to be attained and they demand that you work harder and surrender more until you reach it. Yet through this process, when one reaches enlightenment one sees that it means to come back to being just here. Through this process of striving

and surrender one learns what it is to be here in the most full

meditation research and various traditions

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Sometimes it's more effective for an individual to take the route of striving to the end of striving in order to cultivate awareness and let go. For others it's just to be here with awareness from the very beginning. So, it's important not to get fixed on the form or the conceptual model of how practice is supposed to happen. Rather one should try to understand meditation in the terms of the mind, the qualities that are cultivated and the end experience or the end way of being that these qualities can develop.

Walsh: Thank you. It's a novel experience to be trying to cut Jack short. At the retreats one of the few things that's even more important than whether there are nuts or fruit around is getting to listen to Jack's talks.

reasons for meditating Deane Shapiro: What I'll try to do is review how I think some of the scientific literature and some of the visionary literature might come together. For the next few seconds I would like those of you who meditate to ask yourselves, "What are the qualities that I think an ideal meditator has?" And then in that context, "What was I looking for when I became a meditator?" These are important questions that relate in a fundamental sense to some of the issues that Daniel Goleman raised earlier. I have a feeling that many of the people in our society, especially those who have been exposed to the "scientific research literature from the laboratory," are beginning to meditate for reasons different than you may have had, or that people at a conference like this may have. Many people seem to be meditating primarily for the relaxation response effect, or for the reduction of certain tensions quite apart from any spiritual value. The distinction between meditation as a self-regulation strategy and meditation as an altered state is not often made (e.g. Shapiro, 1978; Shapiro & Giber, 1978). However, meditation research is beginning to be able to discriminate the "expectation effect," i.e., why people begin to meditate. In a number of ways the context, what you're looking for when you begin to meditate, determines what you get out of it.

My own expectations began in 1970 when my wife and I went to Asia and spent about a year and a half studying in different monasteries "in search of the miraculous." My formal training in psychology came later and I'm thankful for that sequence. Otherwise I may have had a more analytical scientific set about what I should have expected, and this set might have made it difficult for me to have some of the powerful experiences which did occur. On the other hand, I might add, I did find that just as there are often blinders and limiting perceptions in our Western tradition so too are there blinders and limiting pre-

conceptions in the Eastern traditions. What truly seems necessary is a kind of balance between the two—drawing the strength from each tradition. All this came to me in a flash, of course, when I was in a monastery meditating early one morning. A thought like a Koan came into my mind, one of those spontaneous thoughts one can't get rid of. The Koan is this: Where does the Zen master go to the bathroom? Let me leave that Koan for you to solve, and go on....

One of the things that concerns me about the future of meditation in the West, is that many people and organizations have been promoting meditation quite slickly, and I'm afraid that there may be what I might call a "meditation backlash." Some people are going to say, "Ah ha, it's not a panacea, it doesn't help us after four to ten weeks of practice. Therefore it's no good."

Roger Walsh and I are editing a book on meditation (Shapiro & Walsh, 1979). One of the articles we have included is by Leon Otis (1979) at Stanford Research Institute, titled, "Adverse effects of meditation." In this study he found there were a number of people who had negative experiences as a result of meditation, and contrary to what you would expect, these experiences occurred more in long-term meditators. Several individuals described their experiences with meditation as a kind of addiction-they felt they couldn't give it up even though it was unpleasant, and they felt it was having some negative consequences for them. This study is important for two reasons. First, it suggests that those who claim meditation is a unimodal panacea should be much more cautious. Meditation may not be equally effective for all individuals, and therefore not always a "treatment of choice." Second, what is also interesting about this is that a closer look reveals that this was the same data which, when analyzed several years ago, showed generally positive effects of meditation (Otis, 1974). I think this indicates that we all have our own glasses, our own blinders, including we who study meditation. We perform a study looking for certain results and often that is only what we find.

My own bias is that meditation research is going to have to become both more precise and more visionary. More precise research may have quite important bearing on the clinical and psychotherapeutic uses of meditation. In addition to clinical outcome studies, we need more work on the components of meditation. For example, it's important to look at expectations, and how these affect the end meditative result; also research can look at the demand characteristics, i.e., what the training

meditation and negative effects teacher says to the student; and finally we can look at motivation (Shapiro, 1979).

There is a cartoon by Feiffer that illustrates some of these component aspects of meditation, and it proceeds something like this: Harry is sitting meditating; Madge walks in and asks, "Harry, what are you doing?" "I'm concentrating on my mantra." "A mantra? What's a mantra?" "It's a secret I cannot tell." "Harry, what is a mantra?" "I cannot tell." "Harry, I must know what a mantra is. Tell me what is a mantra? It's either me or the mantra." Harry doesn't tell and she packs up her bags and leaves, and Harry says, "See, it works; no stress." Meditation may be working for a variety of reasons other than the ones that the literature cites, and I think we need to research these reasons. For example, those of you who do meditate know it involves a rearrangement of life style. Further, meditation often involves and/or is preceded and followed by cognitions, e.g., when you don't meditate, what kind of things do you say to yourself? When you do meditate, what kind of things do you say to yourself? When meditation is used in psychotherapeutic practice, we as therapists have to be very sensitive to such antecedent cognitive variables as motivation and expectations. The therapist can't just sit a person down and say, "Meditate. It's going to be good for you." It requires strong commitment, and motivation on the part of a client. These precise issues-motivation and expectation-need to be dealt with in the therapeutic process as part of the context for meditation.

vision in research

precise

issues

I also believe that meditation research needs to become more visionary. We need to look at the original goals of meditation -as a means of developing a new way of being in the world, of developing a more harmonious relationship with ourselves, with others. and with nature. Part of this vision is discussed in the classical texts. Daniel and Jack discussed the Abhidharma, and Daniel Brown (1977) has discussed the Mahamudra. Some see these texts as visionary "religion" and what is done in the laboratory as precise "science." However, as Daniel Goleman pointed out earlier, the people who wrote these texts also lived what they wrote. They experimented on themselves and they looked at the way their minds worked and at what helped their meditation and what did not help their meditation. This is very much a scientific process, one which develops a phenomenology of meditation. I hope people like yourselves who do meditate will, in a sense, study and learn from yourselves. I believe that the most promising future meditation research may lie in the model of a personal scientist, using our selves as subjects—and combining the precision of Western

phenomenological science with the vision of Eastern thought and practice.

Goleman: I want to comment on the Otis research on negative effects (Hassett, 1978). In the study he found there was a certain subgroup of people at Stanford Research Institute who had volunteered to take part in the study who continued to meditate; also there were dropouts who didn't have good experiences and left, and there were others who continued to meditate but who had a range of negative experiences. I think this sort of finding will become more common; I know other people are talking about negative effects in terms of a "backlash." However, I think in terms of grounding theory in experience this is just a bit of data, useful in refining the precision of our thinking and guiding further research.

grounding theory

This has been done already in a study I did with some colleagues at Harvard on identifying the best candidates for meditation (Schwartz et al., 1978). It showed that you could predict on the basis of the way a person experiences anxiety whether or not he would have a positive experience in meditation. That is, if one meditates to reduce anxiety—and most people in this culture do initially—it can be predicted for which person meditation will in fact reduce anxiety, and for which it will not, or may even worsen it. The basic dichotomy is between those who are somaticizers, who experience physical symptoms of anxiety, and those who experience cognitive anxiety. Meditation is the treatment of choice for cognitive anxiety but not for somatics; somatics really should be jogging. The individual is identified by his responses to a questionnaire. It's very straightforward, with questions such as, "When you're upset, do you have butterflies in your stomach, or do you worry in excess about what's happening?

predicting positive meditative experience

Shapiro: I think the kind of work Daniel is talking about is excellent and it has the kind of precision I mentioned. Also, in reference to anxiety, some people are both; they have worrying and butterflies (then it's better to meditate while you jog).

Kornfield: There's another aspect to research on the effects of meditation which is also important. Much of the study of meditation views it as a rather linear learning process where there are certain variables that will change or not change over time in a particular dimension. From my own experience and research, it's quite clear it's a much more holographic process than that. Often meditation involves what in psychotherapy would be called regression and subsequent reintegration. To study a group of people examining some variable over a par-

research and the meditation process

negative

emotions

meditation

in

ticular period of time, especially a short one, overlooks the fact that meditation is a very complex learning process. In traditional psychoanalysis at certain points in the transference process one could, by certain measures, see great amounts of negativity and perhaps conclude that psychoanalysis is a very unhelpful experience. Yet if one waited some months and measured again it could prove to be positive for the clients. I'm afraid that much of the research done on meditation, not being grounded in phenomenology and practice, has viewed it as a simple linear process and looked for variables to change in ways that are really quite irrelevant to how the process develops.

Walsh: One of the general themes here is the difference between meditation research and the goals for which meditation was originally introduced. One of the teachers with Jack last year at Barre, Massachusetts, on hearing that one of the major interests in meditation research was lowering blood pressure, told us the story of the thieves who went to hear one of the Buddha's lectures. One of them used the rapt attention of the crowds to pick pockets and did very nicely. The other one started listening to the talk, got distracted and was enlightened. At the end of the talk when the two thieves met, the first one who had been busy picking pockets was outraged and castigated the second one for having nothing to show for his time.

Audience: I have been meditating without a teacher. When negative experiences come up, I don't have anyone to discuss them with, and I wonder how I can deal with them.

Kornfield: It is important to understand that in insight and awareness meditation, the purpose is not just to be relaxed or to create a certain state, but that negative emotions are part of the practice. They happen to absolutely everybody, and much of what meditation training is about is learning to relate to them with some balance, without getting caught up in their entire sequence, as Corrado mentioned. The problem for someone meditating on his own is not how to avoid them, but how to work with them, not necessarily how to transmute them, but just how to let them be there without being affected by them.

Audience: To go back to some possible different uses of meditation, I think there is a difference between wanting to use meditation to reduce blood pressure, or to relax, and meditating as part of being on a spiritual path. Some people may not want negative experiences because they want only relaxation, and others know that negative experiences are a necessary

aspect of the spiritual path. Also, it's part of our cultural bias to want positive results right away.

Audience: That touches on even a larger question which needs to be asked when we are talking about research related to meditation, i.e., what definition of meditation is being used? In most traditional meditative systems the use of a teacher's feedback and corrective advice is extremely important. If people sit down and say a word to themselves with the idea of reducing their blood pressure, and they think that is meditation, and if we then get reports from those people that they are ill-affected, does that really have anything to say about the people who are following a spiritual path or who are getting corrective feedback from a teacher? This could be a problem as these activities become more and more popular and more and more people adopt something that they think is meditation which may never have a real relationship with other types of meditation.

research and the definition of meditation

Walsh: That's a good point. I think if you look at meditation research specifically, and psychotherapy research in general, there is an evolution of research questions. At first the question is, Does this thing create an effect? Then researchers began to realize that what is taken at face value as one homogeneous phenomenon is actually a highly complex, multidimensional stimulus array. A subsequent phase of research becomes a type of component analysis, looking at the specific components which actually are effective in eliciting specific effects, and what combinations and permutations of those stimulus components are most efficacious. I believe you're right, and that there is a need for much finer analysis to be very careful and discriminating between all these different subcategories.

a finer analysis

Goleman: It's not only a finer analysis we need, but an integrated overview that gives a context for understanding the entire process. Such a context would make sense of facts such as that at some point certain people experience negative things during meditation. That bit of data in and of itself can easily be taken totally out of context. When people understand it in a naive way, they conclude that meditation is bad for you, rather than as indicating, for example, that meditation is better for some than for others, or that at certain stages negative experiences can occur. I think it speaks to the need for an integrated theory which can encapsulate all the various bits of data. They are extremely various because it's such a complicated process.

an integrated theory

Walsh: I want to thank the presenters for being willing to be with us and share their experiences. Also, as I continue to

meditate and hopefully learn more, I come to appreciate more the work that others have done. The fact that others can really help clear the path a little bit and that there is someone that I can go to, or someone who has said something that connects for me is very significant. I have a great deal of personal appreciation for those who have done the work in general, and to these people in particular. I want to thank them for that as well, and I want to thank you all very much for being here and providing this interaction.

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