

THE ABHIDHARMA: A CROSS-CULTURAL MODEL FOR THE PSYCHIATRIC APPLICATION OF MEDICATION

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RECENT interest in altered states of consciousness has increasingly focused on meditation. The popularity of various meditation groups and teachings, including traditional Indian Yoga, Transcendental Meditation (TM), Sufism, Zen and Tibetan Buddhism attest to the powerful appeal of the meditation "movement". This is also illustrated by attempts at application of meditation in the field of mental health.

Contemporary Western paradigms have made important progress in detailing some specific aspects of meditational phenomena, generally limited to describing the objective aspects of meditation. In this paper, we will present an empirically derived system dealing with the experiential phenomena of meditation. We hope to show that this system has heuristic value for development of clinical applications of consciousness-altering techniques. The system utilizes the Buddhist *Abhidharma* psychological system, as presented in the 1600 year-old treatise, the *Visuddhimagga*, as the cross-cultural basis for such an approach.

WESTERN PSYCHOLOGICAL PARADIGMS AND THEIR RELATION TO MEDITATION

PSYCHOPHYSIOLOGY: A consideration of the major Western approaches to the study of meditation should illustrate the importance of systematic approach to the *subjective* phenomena of meditation. Physiologic study will be the first of the Western approaches that we will consider.

Benson, Wallace, and associates' initial reports of a "hypometabolic physiological state" resulting from TM practice appeared to provide useful physiological markers for changes of state of consciousness said to occur through this practice¹. Other studies, however, have shown that certain meditative phenomena are more complex than was initially proposed. For example, electroencephalographic (EEG) studies show some practitioners of different meditations to be in predominantly beta-wave activity², others in theta-wave activity³ and still others in EEG "sleep"⁴. These stand in contrast to the original reports of predominant alpha-wave patterns of background EEG. Carefully controlled biochemical studies comparing plasma concentrations of stress-related neurohumoral metabolites have also not been specific in distinguishing meditation from other mental states⁵.

Such results pose certain methodologic problems. For example, the actual techniques involved in different types of meditation serve as artifacts and confound the physiologic parameters being measured. The attention to slow and deep breathing in Zen monks, for example, can affect cardiopulmonary and metabolic variables in a way that other meditational techniques not dealing with breathing may not. In another respect, the years of training of

individual practitioners, if not properly accounted for, may also confound these results. For example, the meditation of an accomplished Indian Yogic ascetic may differ from that of a one-year Western novice as much as the exercise-related cardio-pulmonary responses differ between a trained athlete and a sedentary executive.

Most important, the actual changes of consciousness are not necessarily correlated with the physiological parameters measured. This issue is often excluded from the experimental design of this type of research. A more systematic means of codifying meditative experiences, which might link experiential changes with changes of physiology would therefore, prove valuable.

PSYCHOANALYTIC PSYCHIATRY: One characterization applied by the psychoanalytic school to meditation phenomena is that of regression⁶. This has been qualified by some investigators as "regression in the service of the ego," akin to Kris's description of the creative act⁷. Emphasis is placed on the experience of cognitive and perceptual modes that are seen as earlier or more primitive than those of normal adult function.

Another psychoanalytic concept applied to meditation phenomena is that of "de-automatization," reflecting a reinvestment of percepts and cognition with attention⁸. This term, although not as popular as regression, may provide a more appropriate description of the changes of consciousness occurring in some meditative states, and does not carry with it a potentially judgmental connotation.

One of the limitations of the psychoanalytic approach to meditational phenomena, particularly regarding regression, is that the paradigm emphasizes interpretation rather than description. It concerns itself mainly with the meanings and messages of the particular meditative state of consciousness from the perspective of the "normal state of consciousness." This interpretive approach, however, does not seem to fully provide for the fact that further along the development of meditation skill (in the more advanced meditative states, to be described later) the meanings and messages of the states carry less significance than does the actual experiential state.

Therefore, although valuable in its ability to interpret the developmental significance of the earlier meditative states, the psychoanalytic paradigm is not oriented so as to provide a means of encompassing the range of subjective meditation phenomena.

SYSTEMS APPROACH MODEL: This is a relatively new model through which attempts have been to conceptualize states of consciousness, particularly by Tart⁹. In this model, a particular state of consciousness is viewed as a system, or a group of functionally related components. A state of consciousness is made up of various psychological functions, such as time sense, sense of body image, and memory. Given the complex nature of its component interactions, this state operates, for each function, within certain ranges, and is stabilized by various feedback processes. In the sleep state, for example, the time sense becomes highly plastic, but is subject to feedback from the perception of external stimuli.

Induction of a meditative state is seen as a destabilizing process by which the normal state of consciousness is disrupted by various techniques, and new functions or ranges of function become operational, ultimately stabilized by processes similar to those which operate for the normal state. One is maintained in a meditation state as long as attention is appropriately deployed. Return to the normal state is achieved by a process of destabilization of this new meditative state, allowing a return to pre-existing functions and range of function.

An attractive aspect of this model is that it approaches the study of states of consciousness within a framework that is relatively value-free, although it does deal with subjective psychological variables. Few attempts have been made, however, to demonstrate the predictive or clinical applications of this approach, and it must presently be seen as more speculative than the other paradigms discussed.

THE ABHIDHARMA PSYCHOLOGICAL SYSTEM

An important concomitant of further investigation of meditation would be an approach that emphasizes the description and orderly study of the subjective effects of the meditational disciplines thereby providing a usable nomenclature. This may well be accomplished by employing a model drawn from the Buddhist meditation tradition.

Buddhism utilizes a number of meditation techniques in its training procedures. Single-minded attention to patterns of breathing, often while sitting immobilized for varying lengths of time, is a popular technique. Further on, in the Zen Buddhist tradition, rituals and manual labour also play an important part of meditational training. Progress in this meditation is designed to allow one of the experience of Nirvana, or a state described as "complete and total liberation from suffering"¹⁰.

(Tibetan Buddhism has achieved currency in this country for less than a decade, but has attracted a sizeable number of adherents.) The attainment of Nirvana is also the goal of the Tibetan Buddhism. Tibetan Buddhism, however, employs a much wider and more elaborate system of meditation techniques than Zen. *Mantra*-chanting, aloud or subvocally, using Tibetan Buddhist meditation. Summoning a visual image to the "mind's eye" with the eyes closed, has developed into a complex system of mental exercises in the Tibetan Buddhism system, and the physical body is used more directly in Tibetan Buddhism than in Zen, by means of physical postures and breathing exercises. Finally, "Analytic meditation" is a technique which aids the introspective process, in some ways similar to psychoanalysis¹¹.

There are three major parts of related Buddhist literature: the rules of monastic conduct, similar to those followed by other Indian religious orders at the time of the Buddha; the *Sutras*, or Scriptures, which relate the sermons of Buddha¹²; and the *Abhidharma*, a psychological system developed from meditation experience. Several condensations and interpretations of the *Abhidharma* literature have appeared from time to time over 2500 years of Buddhism's existence. The most popular version among Buddhist meditation training centers in the East is known as the *Visuddhimagga*. A readable English translation has recently been published¹³. With regard to its applicability to other non-Buddhist, and even Western meditation traditions, such as the Christian mystical tradition of the Hesychasts, a convincing argument has been detailed by Goleman¹⁴, showing how the basic concepts of the *Abhidharma* analyses of meditation can be verified within the meditational literature compiled by practitioners of several disparate traditions.

The *Visuddhimagga* divides techniques of meditation into two primary categories: the Concentrative meditations and the Insight meditations. In this context, Concentration relates to training in intensity of concentration and depth of focus, increasing the ability to gently sustain attention to specific objects of meditation. Fighting distractions prevents progress, as it keeps attention circulating in the state one is trying to leave. Objects of meditation are numerous, and much significance is attached to the compatibility of meditation-object with the characteristics and needs of a practitioner. This is where the role of a qualified teacher becomes particularly important.

Stages of development, known as the *jhanas*, are characterized by the increasing exclusion from awareness of normal perception, thought, or sensation. In way of illustration, a rudimentary form of meditative concentration occurs in most of us at least several times a day, most often forgotten as soon as it passes. When one is totally immersed in work or reading, outside distractions become less intrusive, and a feeling of single-minded focus, with pleasurable affective concomitants, may be noticed.

An account of the Zen breathing-concentration meditation is given by a Zen master¹⁵:

At the beginning you will find it extremely difficult to bring your mind to concentrate on your breathing. You will be astonished at how your mind runs

away....But if you continue to practice this exercise...., you will gradually, by and by, begin to concentrate your mind on your breathing. After a certain period, you will experience just that split second when your mind is fully concentrated on your breathing, when you will not hear even sounds nearby, when no external world exists for you. This slight moment is such a tremendous experience for you, full of joy, happiness and tranquility.

Insight, within the *Vissuddhimagga* context, may be described as "analytical study." The practitioner attempts to maintain a specific cognitive and perceptual attitude towards ongoing experience, whether internal or external. In this scheme, Insight differs from the Western concept of insight in psychotherapy in an important way. The meditational Insight is directed not only at the dynamic contents and conflicts of the mind, but also at the way the mind functions. Therefore, everything the mind does (and also contains) is examined with the aim of disassembly, at getting to the underlying foundation of the function or content. Even the insights or altered perspectives that may occur along the way are approached with the same dissecting attitude. The relative ease of employing a meditation-object in Concentrative practice as a focus attention, however, makes the Concentrative practice the one in which many schools chose to initiate practitioners.

During interviews conducted by the authors, an American practitioner of a Tibetan Buddhist Insight meditation described the effects of one such practice:

I engaged one day in the exercise of "squeezing between thoughts" in order to analyze the "space" existing there. I was able to exclude thoughts from distracting me during the exercise, but was not able to maintain this fascinating "space between thoughts" for more than a few seconds. However, with an extra push, I felt something shift gears in my mind and was acutely aware of a split-second difference between the events occurring outside the window and my internal perception and registration of them. In fact, I noticed the slightest interval between the arising of a random thought and my apprehension of it. After several minutes of this comprehension of the separation of object and my subjective response to it, I began having exceedingly pleasant experiences of beautiful bright lights, an enormous surge of physical and psychological energy, a feeling of great peace and joy, and a mind totally free of thoughts.

In this example, it can be seen how the technique described involved a "disassembling" attitude to the contents and functions of mind, as well as giving an indication of the possibility of a quantum jump between the different stages of meditational achievement which has been cited. The effective and somatosensory concomitants of attaining such stages of consciousness, as meticulously described in the *Visuddhimagga*, are also illustrated.

CLINICAL RELEVANCE OF ABHIDHARMA PSYCHOLOGY

Meditational techniques have been reported to have clinical applicability to a number of physical, psychophysiologic and psychological disorders, either as an adjunctive or sole therapeutic agent. How might the information generated by the *Abhidharma* psychological system aid in clarifying, validating, or directing such therapeutic endeavours:

SUBSTANCE ABUSE. Several retrospective reports have documented a diminished incidence of substance abuse in practitioners of different meditational disciplines. Agents of abuse have included alcohol¹⁶ marijuana¹⁷, cigarettes, heroin and central nervous system depressants and stimulants¹⁸. The similarities and the interchangeability among drug-induced "highs" and meditative experience have also been discussed by Galanter as a possible mechanism for the substitution of one "high" or intoxication "state of consciousness" for another¹⁹. The *Visuddhimagga*, with its careful descriptions of the psychological and somatosensory changes

occurring within meditative states, may prove valuable in helping us define more clearly what are the relevant similarities and differences, and may permit a more rational approach to the attempt to interchange meditatively-induced for drug-induced changes of consciousness.

PSYCHOPHYSIOLOGIC DISORDERS: A number of illnesses felt to have strong psychological overlay have been reported to respond favourably to the practice of meditation. These illnesses have included bronchial asthma²⁰, essential hypertension^{21,22}, headache²³, and ventricular premature beats²⁴. To date, the application of these techniques, and the rationale for their effects on these disorders, have been based on physiological data concerning meditation. Complementary means by which meditation may be applicable lie in knowledge of a system for classifying the subjective effects of different meditations. It may be fruitful to attempt alteration of those subjective experiences in an individual that seem to underlie exacerbations in relation to anxiety, for example, which for some may aggravate labile hypertension or the frequency of cardiac arrhythmias.

PSYCHOTHERAPY: There are a number of published accounts of improved outcome through employing meditation as a therapeutic adjunct in the treatment of both neurotic and psychotic patients. The majority of these studies come from psychodynamically-oriented investigations^{25,26,27}. Preliminary reports from these studies suggest that adjunctive meditation may serve as a vehicle to enhance the ability to free-associate and to facilitate abreaction. Meditation practice in a latter-day religious cult has also been found to correlate with relief in their neurotic distress systems²⁸. The Visuddhimagga's dissection of cognitive, emotional and perceptual experience could facilitate the elucidation of unconscious processes in the therapeutic situation, and may provide a clearer view of preconscious thoughts, otherwise inaccessible. Meditative techniques are also gaining in popularity in relation to "humanistic psychology." Positive changes in "self-actualization" scores have been demonstrated in non-psychiatric populations using meditative techniques²⁹. The Abhidharma literature may also be helpful in outlining a psychology of the "expansion" of consciousness.

Certain problems arise when applying a text such as the *Visuddhimagga*. Two principal concerns are its cultural and religious underpinnings, and its emphasis on introspective techniques and subjective material. The *Visuddhimagga*, however, is primarily a textbook of a religious context. The precise descriptions of conscious experience associated with meditation exercises are phrased in secular and psychological terms, without reliance on dogma or theology. Another aid in the "translation" process of an Eastern psychological text into terms understandable by Westerners, is the existence of a rapidly growing number of English-speaking authorities on *Abhidharma* psychology within various meditation communities in the Western hemisphere.

The question of replication, with regard to introspective techniques, and the feasibility of comparing subjective data, is a difficult issue. The early days of hallucinogenic drug investigations illustrated the difficulty of systematic examination of subjective changes in consciousness. Reliability in subjective self-reports, however, has been demonstrated. For example, in relation to marijuana intoxication, Galanter reported high correlations among measures of subjective intoxication, and with those of physiologic change¹⁹. In addition, the wilful deployment of attention involved in meditative techniques is very different from the unpredictable changes of consciousness occurring with hallucinogens and in dreams.

We have now seen that contemporary Western paradigms used in the study of meditation and meditative states of consciousness, although useful in many regards, do not lend themselves to detailing the actual subjective experiences of meditative states. The *Abhidharma* psychological system developed within the Buddhist meditative tradition is concerned with the definition and elaboration of a psychology of states of consciousness induced through meditation. It has predictive and descriptive value within the Buddhist

meditative traditions, in terms of the subjective effects occurring as a result of particular meditation techniques. It is possible that further investigation of this system can augment Western approaches to investigating and utilizing meditation-induced changes of consciousness. Further work in subjective meditation phenomena that utilizes this system data may allow for a fresh perspective on some important issues dealt with by Western psychiatry.

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