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From Ordinary to Lucid Dreaming: Research and Politics of Dreaming in North America

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In recent years the people of North America have witnessed an increase in the value we place on dreams as evidenced by the formation of the Association for the Study of Dreams; the number of dream books being written; grass roots interest as expressed in workshops and classes being offered in everything from churches to community mental health centers; an increase in the number and variety of articles on dreams in the popular press; and stories in literature, film, and television about the potential of dreams. Although virtually everyone has had an interest in dreams, serious investigation into them is still a relatively rare phenomenon.

Recent historical roots to such inquiries can be traced to the work of Sigmund Freud and the publication of *Interpretation of Dreams* (1). In a count of the professional citations over the last 100 years dealing with dreams Nielsen (2), a Canadian psychologist, observed that following the publication of Freud's classic work there was a significant increase in the number of publications about dreams. This leveled off after 29 years. He called this the *psychoanalytic era*. Another significant finding about dreaming occurred in 1953 when Aserinsky and Kleitman (3) discovered Rapid Eye Movements and their association to sleep mentation. Nielsen points out that a similar surge in publications occurred after their classic study was published. He identified this as the *psychophysiological era*. But as with the surge in professional interest following the publication of Freud's book, this also tapered off after a comparable length of time. Moffitt and Hoffmann (4), also Canadian psychologists, have argued that there is an emerging consensus that the scientific study of dreams has not lived up to the potential that motivated much of the research following the discovery of REM sleep in 1953. Although much had been learned about the descriptive physiology of sleep, the strongest psychophysiological association remained that between eye-movements and dream content in REM sleep. However, the problem is compounded with the realization that reports of dreaming can be obtained from awakenings from all stages of sleep with the likelihood of obtaining a mentation report from stage REM the highest. Foulkes, of Emory University in the United States, has been a leader in this emerging view, arguing that both psychoanalysis and psychophysiology have contributed very little to our scientific understanding of dreaming (5). The remedy he proposes is the development of a cognitive theory which views dreaming as a unique form of species-specific higher symbolic activity. Other prominent dream researchers and theoreticians have joined Foulkes in his "call to mental arms". For instance, Fiss (6), a clinical psychologist, has claimed:

the fact that sleep researchers have ... emphasized the biological substratum of dreaming and by and large neglected the psychological experience of dreaming has given rise to a curious paradox: despite the monumental achievements in sleep research in recent years, our prevalent notions of dreaming continue to be derived principally from clinical practice and psychoanalysis -- as if REMs had never been discovered. In brief, the technological breakthrough of the fifties and sixties has had relatively little impact on our understanding of dreaming.

That we are now at the dawning of a third era of professional interest in dreams is clear. Some feel that it will be marked with the publication of David Foulkes ground breaking work, *Dreaming: A Cognitive-Psychological Analysis* (7). In this book Foulkes (5) argues that not only is the psychophysiological approach bankrupt as a methodology for studying these internal nighttime experiences, but that the previous emphasis in the dream literature on interpretation of manifest content of dreams has been fruitless. Dreaming, Foulkes maintains, is a *cognitive process* which has identifiable regularities.

What is the Process Approach to Dreaming?

The previous emphasis in the dream literature on interpretation of content and act frequency listings of the manifest content of dreams are fruitless according to Foulkes because dreaming is a cognitive process. That is, its primary function is the reprocessing of information which fit highly predictable criteria. These five regularities in the dream process are: dreams always tell a story; are experienced by all senses; integrate recent events into memories of distant ones; are bizarre in that not all dream events have waking parallels; and are perceived as real until we wake up. Further these highly predictable dream qualities have implications for the function of dreaming.

Therefore, according to Foulkes, the actual content of the dream may have implications for the process involved. The manifest content is not the process but rather an outcome of the process. An analogy would be in the production of a movie. Although one needs to have a good story to tell in order to be successful, what's more important is *how* the story is told. What dialogue is used, which camera angles work, how should it be staged, etc. The process of putting together a movie can make or break the actual content of the story. So it is with dreams, according to Foulkes, that the *process* of putting together the dream is the primary function, the *content* of the dream story is secondary.

Regarding this view of a cognitive psychology of dreaming, Baylor (7) has argued that "cognitive psychology has been enormously successful during the last few decades, and dream research has much to gain by affiliating itself with the cognitive sciences. Reciprocally, dream research has much to offer since any science of the cognitive that *excludes* nocturnal mentation must necessarily be incomplete: Nothing less than a 24-hour model of cognition will do". On the other hand Moffitt and Hoffman (4) point out:

The apparent bankruptcy of dream psychophysiology was due in large measure to a

collection of unfortunate habits of mind and practice. Chief among these were a single-minded dependence on a nearly intellectually bankrupt dream psychology and on a minimally quantitative approach to the measurement of electrophysiological parameters . . . consequently, it seems reasonable to suggest that the proper intellectual home of dream psychophysiology is as much with the historical and contemporary traditions of experimental phenomenology as with an asemantic, structural, cognitive or neurocognitive dream psychology.

Although Foulkes recent book may be the marker of a new era of inquiries into dreaming it doesn't represent the breadth of contemporary approaches to the phenomenon. For instance, two more conservative approaches by contemporary American dream theorists are even narrower in their conceptualizations of the "meaning" of dreams. Hobson and McCarley (8) , of Harvard University, see dreams as psychologically neutral or relatively meaningless by products of mind-brain neuronal activity, while Nobel laureat Francis Crick and his colleague, Graeme Mitchison (9), speculate that while dreams have an important programming function, therapies which encourage remembering dreams can be *psychologically harmful*. In their view, dreams are helping the brain computer to forget or unlearn maladaptive connections, and remembering dreams only reinforces distorted thinking.

Of course members of the contemporary dream work movement also disagree with the conceptualizations of dreaming as meaningless. The concept that dreams have meaning for day to day personal life really began with Freud and continued with the neo-Freudians (1). The function of dreaming, in their perspective, is to discharge repressed instinctual impulses and to modulate these instinctual tensions so as to preserve sleep. Whereas, the function of dreaming according to the Jungian perspective is to orient the dreamer to unacknowledged aspects of the self, to help achieve psychic equilibrium and to have a guiding influence (10). Research based approaches to dream function tend to focus on the dream as central to information processing of daily residues. For instance, Berger (11) argues that the function of dreaming is to integrate daily residues into old memories.

The "Politics" of the Dream Work Movement

Despite what we have learned about dreaming it seems to some to be wholly inadequate. Some consider dreams as having meaning in a larger framework than ones personal experiences. These perspectives may be considered transpersonal, philosophical, and/or spiritual and draw their impetus from the historical view that dreams hold messages from the gods. Although most contemporary dream workers, both academic and clinical, would conceptualize the dream as a source of personal information, some professionals and some lay people acknowledge that the dream can and does *occasionally* offer a brief glimpse into the actualization of the "higher" self beyond the limits of the "personal" self.

Sometimes, albeit rarely, dreams offer us a profound view of life. We wake up feeling like we have been in the presence of something much more than ourselves yet intimately

tyed up with self. We know at some primitive level that what we've just experienced was not *just a dream* to be quickly dismissed and forgotten but that we have experienced something much more. Something so difficult to describe yet so moving as to transcend our daily personal cares and considerations. We are awe struck, moved to tears, speechless, immobile. To explain such experiences as simply glimpses into our deep unconscious is not enough. It falls short of capturing the profundity of the experience.

Because of the persistence of such beliefs and the emergence of the idea that the dreamer and not the therapist nor the researcher OWNS their dream, we are seeing emerging in North America a grass roots movement valuing dreaming. Likewise a few contemporary dream researchers are also *beginning* to seriously look at the notion of the higher potential of dreaming.

One of the earliest and probably most influential figures in this popularization of the dream is Montague Ullman (20), who is a New York psychiatrist who in the last 20 years has been teaching group dream work techniques designed to keep the ownership of the dream in the hands of the dreamer. Thus he is essentially deprofessionalizing the process of dream work. In Ullman's method the dreamer shares his/her dream with the group free of associations or context cues. The group members free associate to the concepts in the dream. An interchange between the dreamer and the group members follows where the dreamer is free to give context information. Finally the dreamer decides what of all of this is relevant to his/her dream.

Further sociological signs of the popularization of the dream in North America are the emergence of dream organizations such as the Association for the Study of Dreams and Lucidity Association, dream publications such as *Dream Network Bulletin* and *Lucidity Letter*, dream articles in national magazines such as *Time* and *Newsweek*, dream features on national television such as the *Donahue Show* and *Oprah Winphrey*, and dream movies drawing sellout crowds such as the *Nightmare on Elm Street* series. A antidote exemplifies this renewed desire to know about the dream. A United States national magazine, *OMNI* (21), ran an article on dreams featuring it on the cover. The cover read, "Control Your Dreams!" That issue of *OMNI* sold out nationally for the first time in the history of the magazine, with one million copies sold. Savay New Yorkers, where the magazine is published, even came to the editorial offices of *OMNI* looking for extra issues but none were to be found.

Clearly there is emerging a need to know about dreams which is unprecedented in recent history. Another factor that has contributed to this need to know is the experience of dream lucidity. I have put aside a discussion of the lucid dream until now for two reasons: first, I have an obvious bias about the topic and second, I feel that more than any other body of work the lucid dreaming literature of the last decade has spearheaded the resurgence of interest into dreaming in America. The reason for the emergence of an interest in dreaming is because it represents a generalized emergence of questions concerning higher states of consciousness. Dream lucidity *directly* addresses such questions.

Now I will briefly summarize my own program of research into dream lucidity. There are three questions which I have pursued over the last decade since completing my

dissertation on dream lucidity in 1978 (22): what is the psychological content of dream lucidity; who is likely to spontaneously experience dream lucidity; and what is the relationship of dream lucidity to witnessing the dream? Before I review this program of research I want to emphasize two methodological issues which were quickly apparent to me. The association between dream recall and lucid dreaming frequency is so robust that one must *always* control for variance associated with dream recall abilities. Secondly, in mass testing situations we have lost as many as 50% of our samples because we could not be sure that the subjects understood the definition of dream lucidity. Thus we have required that all subjects include a sample lucid dream which demonstrates their understanding (23).

The Psychological Content of Lucid Dreams

Ironically, perhaps, the most noteworthy thing about a lucid dream is how similar it is to an ordinary one (24-26). In extensive content analysis using the Hall and Van de Castle system (15) as well as self evaluations of the dream by the dreamer I found that for the majority of the scales there were no lucid/nonlucid differences. The differences which emerged were not spurious. There were more differences when the dreamer evaluated the dream than when independent judges rated the dreams. This indicates that lucid-nonlucid dream differences may be to a large extent in the *eye of the beholder*. Specifically, lucidity brings with it a larger cognitive or thought-like element. When people experience dream lucidity it typically emerges from an ordinary dream. Suddenly, the dreamer says, "Hey, this is a dream!" Once this fact is recognized, the dreamer usually realizes that he or she can do anything, after all it's only a dream. For instance, a 25-year-old computer operator decided to try to see God. The next time he turned lucid he found himself in a roomful of people. "I closed my eyes and concentrated on the idea of God, repeating the word God over and over," he explained. "Then I had a vision of a long wooden table with food on it, something like a painting of still life. I found I could control the perspective from which I viewed the table: close up or far away, up or down."

Although not exactly the expected vision of God, the man's dream was certainly the sort of distinctive experience lucid dreamers often describe. The captains of their own nocturnal consciousness, lucid dreamers can evidence *some* dream control. In fact the amount of felt control is one of the most robust content differences between lucid and nonlucid dreams by both judges and dreamers. I am going to take a moment and share some thoughts about dream control. A long sought after dream attribute, Tart concluded some 10 years ago in a review of the dream control literature that it is best found while lucid and sleeping. Yet no one ever took the ability to control ones dreams seriously until the recent explosion of work on lucidity. Ironically, questions of the advisability of controlling ones dreams are now often found in the lucid dreaming literature. At a recent lucid dreaming symposium in the United States this question was hotly debated (45). Other lucid/nonlucid differences have also emerged from my data. For one thing, there tend to be fewer characters in lucid dreams than in ordinary ones: The dreamer is the star

in these dreams. Negative emotions are reported less often in lucid dreams although lucid dreams can be nightmares. In fact, when people spontaneously describe the experience a commonly reported feature of lucid dreaming is the feeling of "fun" and "ecstasy". However, in normative data with midwestern college students no differences in positive emotions were identified as a function of type of dream.

Another interesting component of dream lucidity seems to be the central role of balance related concerns. By balance I mean bodily balance, such as perfecting dream flying skills, as well as emotional and intellectual balance. In order to remain lucid one can not get too caught up in the emotions of the experience or the consciousness will fade. Further in the early stages in order to maintain the consciousness it takes a cognitive balancing act. That is, balancing ones statements of awareness with other cognitive concerns of the dream.

Individual Differences Associated With the Dream Lucidity Ability

I have recently summarized this body of research in my forthcoming edited book with Steve LaBerge so I shall briefly highlight this work here (23):

Two variables are the best predictors of the lucid dreaming ability; dream recall and interest in or experience with meditation. Simply and obviously the more dreams you remember the more likely you are to remember a lucid dream. This may simply be because you are paying attention to your internal, sleeping creations and somewhere along the way it occurs to you that they are just that, internal, sleeping creations. Most interesting of all from my perspective is the relationship of meditation practice and the dream lucidity ability. Reed (32) identified this statistical association in the middle 1970's although the obvious philosophical association, see especially in the Tibetan Buddhists literature (33), has been there for many years. In fact lucid dreaming researcher and theoretician Harry Hunt (34) maintains that lucid dreams "could be considered as a spontaneous meditation state." In research on this association I have replicated this association controlling for dream recall as well as verifying that the subject understands the concept of dream lucidity (35). My colleagues and I have concluded that the best way to gain lucidity in sleep is through a combination of enhanced dream recall in combination with the *practice* of meditation.

Another important marker of the person likely to have lucid dreams involves a visual/spatial skill called field independence. Derived from Witkin's model of psychological differentiation (28), field independent individuals can make accurate perceptual judgements about their environment despite distorting cues which tend to confuse field dependent individuals (29).

Lucid dreamers appear to be somewhat more androgynous than other people, that is, they seem to be strong in aspects of their lives in which others of their sex are weak. Female lucid dreamers, for example, tend to be risk-takers, a trait commonly considered masculine, while male lucid dreamers tend to monitor their inner selves, something the traditional male has not been encouraged to do. Despite this androgyny, though, neither

the men or women appear to differ from their own sex in other sex specific traits.

Some physiological components predispose some individuals to lucid dreaming. For instance, people who frequently have lucid dreams have an excellent vestibular system. That is, they have a good sense of bodily balance and rarely experience any sort of motion sickness. Conversely, when the vestibular integrity of individuals who have never had a lucid dreams was tested using standard clinical procedures we found that lucid dreamers exhibited borderline pathology (31).

Dream Lucidity and Dream Witnessing: Are They Related?

The reason I began research into dream lucidity and the emphasis of my research program in the last three years centers around the role lucid dreams play in higher states of consciousness. When I moved to Iowa I became aware that the university of the Transcendental Meditation movement, Maharishi International University, was located in Iowa. From my reading on eastern philosophies it occurred to me that they might also be interested in dream lucidity so I contacted them. What has followed is a program of research into the association of dream lucidity to dream witnessing. The latter is a described in the TM literature. On the surface, at least, it seemed that dream lucidity and dream witnessing were the same; both involved awareness of dreaming while dreaming. Yet in extended conversations with my colleagues at MIU and with sophisticated meditators it became clear that there is a developmental relationship between them. Simply, Alexander, Boyer, and Orme-Johnson (36) hypothesize that dream lucidity is an *entry point* that evolves into dream witnessing. Our preliminary laboratory findings support this model. While both involve conscious awareness of dreaming while dreaming, lucidity seems to be a cognitively and physiologically aroused sleep while witnessing is the opposite. That is, it involves the cognitively and physiologically quiet, passive observer of sleep (37).

Closing Comments

In this brief talk I have tried to characterize current research and popular concerns with dreaming on the North American continent. I was especially careful to include Canada as well as the United States because of the central role many Canadians are playing in the development of the field. Clearly dream work is coming again into its own both as a popular movement and as a serious area of research inquiry. I think that this renewed interest in the dream in *North America* is due to several reasons:

1. the publication of David Foulkes, *Dreaming: A Cognitive-Psychological Analysis* highlighting for dream psychology what is occurring in psychology in general, a return to the mental experience;
2. the work of Montegue Ullman in deprofessionalizing dream work and returning the dream back to the dreamer after more than half a century of therapist/scientist

"ownership";

3. due primarily, although not exclusively, to the work of Stephen LaBerge, the "discovery" and pursuit of the lucid dream as a legitimate sleep phenomenon; and

4. a need on the part of the people of North America, especially the post-World War II baby-boom generation, to be in touch with internal experiences of a spiritual nature for which dreams and especially lucid dreams are ideally suited.

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