externally generated sensations and movements. (Corollary discharge or feed-forward mechanisms inform brain structures of internally generated events.) It is postulated that these mechanisms also exist for mental events and that they are disabled during sleep. As a consequence, the dreamer may experience internally generated neural activity (and the associated mental experience) as externally induced. This mechanism may also explain the phenomena of hypnagogic and hypnopompic hallucinations, particularly when associated with sleep paralysis.

The function of dreaming has prompted much speculation, and many theories have been offered but none have been validated scientifically. In ancient times, dreams were believed to be prophetic. A century ago, Freud theorized that behind all dreams are unconscious thoughts and wishes so strong that they threaten to interfere with sleep. Dreaming allows sleep to continue by expressing these mental processes in disguised form as the "manifest dream." The true unconscious thoughts and wishes remain hidden in the "latent dream content" that the psychoanalytical process seeks to make conscious through the "dream work." Recent theories have postulated that dreaming serves to either process and solidify (or, alternatively, undo and remove excess) memories and associations made during waking. Unfortunately, many of these theories confuse REM sleep with dreaming, and supportive evidence has remained elusive. Nevertheless, this remains a tantalizing area for future research.

Finally, there remains the unresolved question of whether mental activity experienced as dreaming was actually ongoing during sleep prior to awakening. The impression that this is the case is often irresistible but may be wrong. Sleep is by and large an amnestic period and little is recalled from the approximately one-third of our lives spent asleep. Although subjects will recall mental activity most of the time when awakened from all stages of sleep throughout the night, the material recalled appears to be restricted to the time period immediately preceding the awakening. We regularly wake many times during the night but usually do not recall the awakenings. If sleep is allowed to continue for a period of time prior to awakening, subjects remember little or nothing from the minutes prior to falling asleep. It appears that at least several minutes of wakefulness are required for the human brain to consolidate memory, and this process is largely turned off during sleep. Thus, without an awakening, mental activity occurring during sleep is not recalled. Experiments subjecting sleepers to sensory stimuli demonstrate that they do not generally recall the stimuli unless an arousal occurs. Perhaps most significant, the common experience of incorporation of a sudden awakening stimulus such as a loud noise into a complex dream storyline suggests that dreams, to a large extent, are formed during the arousal process. It is possible that much of what we experience and describe as dreaming is fabricated or at least elaborated during the arousal process. Thus, the physiological basis and psychological significance of dreaming remain enigmatic.

—Nicholas Rosenlicht

See also—Awareness; Consciousness; Dreaming; Dream Therapy; Freud, Sigmund; Freudian Psychology; Nightmares; NREM (Non Rapid Eye Movement) Sleep; REM (Rapid Eye Movement) Sleep; Wakefulness

Further Reading

Dream Therapy

DREAM THERAPY is an experientially based mental health treatment modality that is practiced both alone and in conjunction with psychotherapy or psychoanalysis. Interpretative work with dreams is an ancient practice. Its derivative, dream therapy, has regained considerable impetus since the 1960s, with increased attention to dreams from both researchers and practitioners. Dream therapy is one of several ways of using dreams to increase personal awareness and understanding of human emotions, behavior, and personality. Some dream therapists stop at this point. Others apply this dream-generated insight
toward motivating or guiding change in the individual. Such changes can occur in a number of ways, including more effective management of relationships, work or behavior, and resolution of internal emotional conflicts.

Modern dream therapy exists amid a number of conflicting and competing hypotheses, some of which are supported by preliminary studies but all of which await definitive proof from controlled scientific study. As a result, there remains a great deal of confusion and parochialism in the field as well as enthusiasm and vigorous advocacy. These differing approaches to dream therapy have evolved over millennia from various cultural traditions of dream interpretation that have been gradually modified by human experience. Consequently, our current practice is most quickly understood through a brief glimpse of its historical context, ancient and recent, and then an overview of the field today.

HISTORY OF DREAM THERAPY

Ancient dream interpretative traditions are believed to date from well before the first recorded dream in 2700 BC. Artemidorus’ *Oneirocritica* (c170 AD) is one of the earliest dream therapy “texts extant.” The similarities and differences of the various hypotheses underlying these dream traditions have been obscured by the custom of grouping them by individual dream theorists or cultures rather than categorizing them by concept and technique, which facilitates comparisons. Nonetheless, these early traditions can be sorted into the following three conceptual categories, for which there are modern derivatives:

1. Parapsychological and supernatural phenomena in dreams: Although this category of ancient clairvoyant or religious dream traditions is widely divergent from dream therapy as we now know it, it deserves mention for two reasons. First, such interpretations are still periodically reported by dreamers to lead to change in their lives. Second, these approaches gave rise to three contemporary remnants recognizable in common attitudes and beliefs about dreams: They can be vehicles for clairvoyance, divination, and necromancy; they can be messages from God; and they can suggest evidence of soul travel.

2. Earliest forerunners of dream therapy: Three forerunners of the psychiatrically accepted practice of modern dream therapy are clearly discernible. First, physical health and illness dreams have long been thought by such practitioners as Hippocrates, (c460–c360 BC), Aristotle (384–322 BC), and Galen (c130–200 AD) to reflect physical illness in the dreamer. Dream therapy has been used effectively, but sporadically, in the prevailing treatments of psychosomatic and other illnesses in addition to health maintenance, including pregnancy. The second tradition, familiar to several major world religions, recognized spontaneous dreams as a means of problem solving, which is a common contemporary application of dream therapy. The third forerunner is psychological insight. Ancient dream accounts have unmistakable psychological elements and clear indications of psychodynamic interpretations.

3. The skeptics: In contradiction to interpretative traditions is a persistent, parallel hypothesis that dismisses meaning in dreams and therefore the efficacy of dream therapy. Skeptics, such as Cicero (106–43 BC) and Schopenhauer (1788–1860), regard dreams as virtually meaningless productions caused perhaps by some internal physiological mechanism ranging from indigestion to brain activity. At most, they believe that the material revealed by dream therapy is in no way special, or that meaning in dreams is a secondary function. This perspective has frequently been fueled by intellectual contempt for some of the earliest approaches to dreams and their present-day derivations that appear illogical, coincidental, arbitrarily rigid, or purely superstitious.

These three traditions of dream interpretation were by no means universal, but they were pervasive and tenacious. During the next two and a half millennia, associated ideas gradually developed, albeit somewhat erratically. Writers as influential as Plato (427–347 BC) formulated dreaming as illustrating the dominant mental impulses and habits of the individual. This train of thought evolved to a concept of unconscious thought and reasoning that continued, out of one’s conscious awareness, both while awake and while asleep (Leibnitz, 1646–1716). Thus, by the 17th century, the concept of dreams was firmly established in the West as a mental process rather than a supernatural communication.

This concept is a fundamental premise of dream therapy. At the beginning of the 19th century, further groundwork was laid for modern dream therapy by the new cultural movement, romanticism. Its emphasis on the notion of the individual and the importance of emotional life, as well as its fascination with introspection, opened the door for the later use of dreams for self-exploration and personal growth.
Schools of Thought

There are currently two basic schools of thought dominating modern dream interpretation—the psychotheoretical and the phenomenological. Although the schools have a number of significant differences between them, the major proponents of the psychotheoretical ideas are psychoanalysts Freud and Jung and those of the phenomenological ideas are Boss and Perls. Their ideas are described in voluminous publications produced in the past 100 years.

Psychoanalytical School: Sigmund Freud's *The Interpretation of Dreams*, first published in 1900, is still considered the Western cornerstone of modern dream therapy. Freud, writing after the explorations of the unconscious by Friedrich Nietzsche (1844–1900), was greatly influenced by the emerging philosophical school of logical positivism. Modern Freudian practice focuses on the practical problem-solving nature of dreaming and uses both the analyst's and the dreamer's associations to understand a dream.

Carl G. Jung, once a student of Freud's, approached dreams in the context of an elaborate metapsychology that describes the developmental nature of the male and female psyches. The concepts of this metapsychology include a particular type of individuation: the unconscious drive of each person to become whole by integrating aspects of the shadow (negative self), the opposite sex, and one's wisest self. Thus, dreams are often seen to compensate for a one-sided conscious attitude. Jungians also believe that dreams utilize universal symbols whose meaning they are trained to recognize and interpret in conjunction with the dreamers' personal associations.

Phenomenological School: Recent developments in dream therapy are based on the existential, phenomenological approach first articulated by Medard Boss. Rejecting Freudian and Jungian emphasis on hypothetical constructs of the unconscious, they view the dream as a valid mode of experience and thus believe the dreamer is better served by focusing on the dream elements without reference to elaborate psychotheoretical formulations or metapsychology.

Gestalt technique is a variation of the phenomenological approach that focuses on emotions. One of its central features is to encourage the dreamer to relive the dream in the present and then, at the direction of the dream therapist, to role play characters and objects from the dream with or without reference to the context of the dream action. The goal is to maximize the dreamer's awareness of associated feelings.

**CURRENT PRACTICE OF DREAM THERAPY**

Many dream therapists identify their work with a particular theory, commonly that in which they are best read or were originally trained. However, with experience, their practice often develops variations and combinations. Therefore, the actual practice of dream therapy is best understood by examining the basic techniques utilized in various combinations by dream therapists, regardless of their original school of thought. These techniques are classified into two areas of intervention: dream control and interpretative techniques.

**Dream Control Techniques**

Dream incubation is the utilization of a presleep suggestion to direct oneself to dream about a selected issue from a specific point of view in order to solve the problem. Thus, one might ask oneself to dream about why such an issue is so troublesome, how to resolve an issue, or what to do about a situation. More generally, one can request more insight about a conflict or just nonspecific “Help!”

Lucidity is being aware of dreaming while one is asleep and actually dreaming. Therapeutic use of lucidity takes various forms. One is the use of lucidity to further the resolution of a waking issue through avoiding unpleasant dream situations by intentionally substituting pleasant dream scenes. Another variation is to enhance the depth of understanding available from the dream by asking oneself or another dream figure during the dream why it is acting as it does.

Dream revision involves going to sleep with the intent to revisit a previous dream and change the ending. One common form is to encourage the dreamer to change negative dream outcomes to positive by rehearsing such instructions or the desired changes before sleep. The hope is that if the positive alteration in the dream is achieved, it will also alter life experience and/or reduce nightmare frequency, as documented in some post-traumatic stress disorder nightmare sufferers. This technique is widely reported in the literature on dreams.

**Interpretative Techniques**

For some therapists, dream therapy is limited to simply recounting the dream a number of times and
clarifying and elaborating the details and feelings. This is frequently seen in addiction recovery with “using dreams.”

The Egyptians and countless others have used the cultural formula technique, in which the interpreter utilizes local or world cultural and mythical traditions that assign certain meanings to particular dream images. The interpreter matches these consensual interpretations to the individual’s dreams by using the interpreter’s memory or a dream book in which they have been recorded. Dream dictionaries are the age-old textbook of this technique.

The psychotheoretical formula technique is an important variation on the cultural formula technique in which the dreamer maintains a receptive posture toward the final interpretation of the therapist. Dream themes and images are interpreted according to a particular psychological theory that assigns specific meanings. Freud called this symbol substitution. For instance, long objects are interpreted as phallic (Freud) and fish as symbolic of the higher self (Jung).

Freud’s “associative technique” idea was to encourage dreamers to describe whatever thoughts and feelings occurred to them in connection with a dream. Helping the dreamer to focus association on those that are either very powerful or are directly relevant to the dream (rather than to the previous association) can avoid drowning the process in tangential detail.

The technique requiring the dreamer’s subjective descriptions of images requires the therapist to elicit a subjectively complete but precise description of the images and actions in the dream. It must be concrete but also include the dreamer’s emotions, judgments, and opinions, however factually “incorrect.” These descriptions are then used as a basis of the interpretation, which is therefore, primarily dreamer generated. This is a core technique of the dream interviewing method described by Delaney and Flowers, and it is now commonly combined with other techniques.

Fritz Perls first proposed that the therapist direct the dreamer to role play certain images in the dream to intensify feelings related to the action or an image in the dream. This emotion-focusing technique, commonly employed by gestalt therapists, can be valuable for dreamers with difficulty accessing affect.

Practitioners of the existential phenomenological view the interpreter as a coach. The coach’s job is to help the dreamer focus through vivid description of the phenomena (i.e., the images and feelings of the dream). The dream interview method is an example of such a phenomenological approach and provides interpreters with a carefully structured sequence of inquiry.

The personal projection technique can be an individual or group technique. Here, the therapist or group leader and members offer their own associations and metaphorical bridges to the dream as if it was their own. This process usually combines cultural and psychotheoretical techniques with individual projections.

The metaphor-seeking dream therapist makes the assumption that the dream is in some way a metaphor for issues current in the dreamer’s life and seeks to find the metaphoric link between the dream and these issues. Johanna King has published on this aspect of dream therapy.

Body work in dreams focuses on the dreamer’s description of bodily sensations experienced while telling the dream. These descriptions help the dreamer relate to analogous feelings and experiences in waking life.

**DREAM RECALL**

Dream therapy requires periodically remembering a dream. This is usually possible since everyone dreams four or five dreams a night, and dream recall is easily facilitated by a two-step process that has been reported to stimulate recall within 1 or 2 weeks. First, a short note is written daily in a dream journal before bedtime about the major events and feelings of the day. Then, any dream fragment, or the first thought that occurs upon awakening, is routinely written down.

**CONCLUSION**

Appreciation of a wide range of therapeutic possibilities for dream work is growing and supported by promising preliminary indications of its effectiveness. However, the difficulty of controlled scientific study designed to test the efficacy of dream therapy techniques coupled with strongly held but divergent views, including skepticism, have contributed to the persistent marginalization of this treatment approach to mental health issues. As the field develops, however, there appears to be a trend toward more blending of approaches that may facilitate both practice and research. As clinical outcome studies become more sophisticated, and as dream therapy practice becomes more evidence based and the training more standardized, it is possible that competent dream therapy
Drowsiness could become a common mental health care resource.

-Loma K. Flowers and Gayle M. V. Delaney

See also—Dreaming; Dreams, Significance; Freud, Sigmund; Freudian Psychology; Nightmares; Psychoanalysis, Overview; Psychotherapy, Overview

Further Reading

Duchenne, Guillaume

G. B. A. DUCHENNE (1806–1875) was born in Boulogne-sur-Mer, a small town in the north of France. After he obtained his baccalaureate in 1825, he decided to undertake medical studies in Paris. In 1831, he presented an uninspired graduation thesis “On Burns” and subsequently returned to Boulogne to enter provincial medical practice. The next several years were marked by a series of personal tragedies, including the death of his wife from puerperal sepsis and his subsequent estrangement from her family. A few years later, a second marriage with a distant cousin was again a disaster. These events probably influenced his decision to return to Paris in 1842. However, there was also a scientific impetus behind...