

**DREAMS AND
DISSOCIATION
THEORY:
SPECULATIONS ON
BENEFICIAL ASPECTS
OF THEIR
LINKAGE**

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ABSTRACT

The linkage between dreams and various dissociative phenomena has often been noted on an intuitive or clinical basis. Dream theory during this century, however, has been associated with and helped to provide the framework for psychoanalytic theory, not dissociation theory.

In recent years interest in dissociation theory and dissociative phenomena has grown. This has also been true of the interest in dreams as understood from vantage points that dispute classical psychoanalytic views on dreaming and that emphasize a role for dreaming in learning and adaptive behavior.

This paper reviews some of these issues in greater detail. It emphasizes the apparent linkage between dream phenomena and particular dream theories with dissociation theory. Possible benefits to dream theory and to dissociation theory when dreams are considered within a broader framework of dissociation are discussed from several viewpoints.

INTRODUCTION

Freud's *Interpretation of Dreams* (1953) is a landmark, serving both as a cornerstone of psychoanalytic theory generally and of the psychoanalytic understanding of the nature and function of dreams specifically. Freud (1953) considered this work to be perhaps his most important contribution.

For several decades after this monumental book was written, the psychoanalytic view of dreaming changed little (Blum, 1976), although some modifications were introduced as ego psychology and then object relations theory occupied increasing psychoanalytic interest (Arlow & Brenner, 1964). More recently, self psychology has emerged as a strong focus of theoretical and clinical interest within the psychoanalytic community. With the theory of self-psychology has come a developing theory of dreams, initiated by Kohut (1977), but further developed by others, including Ornstein (1987), Greenberg (1987a), and Fosshage (1983).

Freud's towering presence within the mental health fields, especially within dynamic psychiatry, has been praised for its enormous contributions, but lamented because of its impediment to the development of other approaches that seek to understand unconscious processes (Bliss, 1988). This lack of innovation has been commented on by Fosshage (1983) in his discussion of traditional psychoanalytic dream theory. Freud's influence also seems to have markedly impaired the development of other theoretical frameworks, one of which is dissociation theory (Braun, 1988). The concept of dissociation, along with its modern day founder, Pierre Janet (1929), may have been poised to assume a major position in dynamic psychiatry until being overshadowed by Freud's development of psychoanalysis and his theoretical contributions in relation to conflict theory, defensive operations, unconscious wishes, infantile sexuality and the like (Ellenberger, 1970).

It has only been more recently, spurred on by several factors, including Hilgard's (1986) experimental work in hypnosis and his neo-dissociation theory, as well as by a resurgence of interest in multiple personality disorder, that dissociation theory and dissociative disorders are widely discussed and studied (Kluft, 1988).

Perhaps because of the lack of interest in dissociation theory during the decades of psychoanalytic preeminence, relatively little attention was paid to how or whether the study of dreams might be placed within the framework of dissociation theory. This paper argues that dreams may be beneficially studied within the context of dissociative processes and dissociation theory. It traces some of the modern roots of what I believe to be the study and interpretation of dreams within a dissociation framework by reviewing the work on dreams of Morton Prince (1910a, 1910b), a leading figure in early dissociation theory. It also reviews the dream theory of C.G. Jung (1954, 1960, 1964), who left the psychoanalytic movement to form his own Analytical Psychology. Jung's understanding of the dream, and that of other members of the Analytical Psychology school (Hall, 1977; Mattoon, 1978) seem to fall within what will be described more fully below as dissociation theory. Finally, in the discussion, I describe more fully how dreams maybe understood within a dissociation framework and within dissociation theory, and emphasize theoretical and research benefits to this conceptual approach.

HISTORICAL. CONSIDERATIONS

Pierre Janet is widely credited with being the father of modern dissociation theory. After decades of relative oblivion, the importance of his work is being increasingly appreciated and reviewed (van der Hart and Friedman, 1989; van der Kolk and van der Hart, 1989). The major portion of his vast writings are still unavailable in English translation, and his possible contributions in a number of areas are only now beginning to be explored. From recent more general reviews available (Ellenberger, 1970; van der Hart and Friedman, 1989), as well as some of his specific writings noted below, it appears that Janet considered dreams to sometimes reflect problematic areas his patients experienced and as potentially useful in his therapeutic work with patients. The present author is not aware of his having systematically formulated a specific theory of dreams as such and he does not seem to have given dreams the central focus in his work that major contemporaries such as Freud (1953) and Jung (1963) did in their work and in their own lives. Perhaps this was partly because, unlike Freud and Jung, Janet was not a "good dreamer" and apparently did not remember his own dreams (Ellenberger, 1970).

Janet (1929) describes certain hysterical patients' symptoms, their somnambulisms, as being "dreams," and his description of monoideic somnambulisms as involving "a blank in the general consciousness, which is represented by an amnesia, and as exaggerated and independent development of the emancipated idea" (Janet, 1929, p. 64), is similar to a modern description of dream characteristics offered to Recltschaffen (1978), a sleep and dream researcher more than half a century later, who emphasized the narrow focus and "single-mindedness" of dreams.

Janet (1925) also discusses the dream as sometimes reflecting the work of repression, a central psychoanalytic concept, but writes that the dream is "the behavior of a sleeping man, and this behavior consists of the low-grade activations of tendencies that have been aroused by various internal or external stimuli acting upon the sleeper" (Janet, 1925, page 644). The arousal of these tendencies occurs "in a very vague manner..." and depends on the "variations in the energetic charge of the respective tendencies..." which are "affected by numerous influences..." (Janet, 1925, page 644). It is difficult to determine how much of the distortion in the dream "is the outcome of repression of one kind or another." (Janet, 1925, page 644).

A more direct challenge to the psychoanalytic view of the meaning and interpretation of dreams from the point of view of a potential dissociation based theory of dreaming was provided in the early years of the 20th century by Morton Prince (1910a). Prince was well known for his work with dissociative phenomena and patients having multiple personality disorders. He chose to investigate dreams by intensively studying a series of dreams in a small number of subjects. He focused his study on various states in the same individual: the normal personality, two different hypnotic states; and through automatic writing. He first obtained volitional memories from his subject in each state and he then attempted to obtain additional memories from the

subject in the applicable states through the method of "abstraction," which he equated with Freud's method of free association, and which he felt was appropriate "for the purpose of resurrecting dissociated memories" (Prince, 1910a, p. 144).

All of the details of this lengthy paper cannot be summarized here, but eventually Prince developed a view of dreams somewhat similar to Freud's in certain ways, but greatly different in others. Using the variety of memories he obtained (that he believed were greater than could be achieved by free association alone), Prince arrived at several conclusions about the formation and nature of dreams. These include: The manifest dream relates to the thoughts of the dreamer's recent life, particularly (as revealed by hypnosis) those occurring in the immediate pre-sleeping state and those occurring during the preceding day. The "motive" of the dream was invariably traced back to "strongly organized systems of ideas which were deeply rooted in the mind of the subject, and represented her mental attitude towards her environment or the problems of her daily life" (Prince, 1910a, p. 175). These "sets of ideas" were "conserved" from the past, as indeed "every experience that is retained as a potential memory leaves a counterpart record in the neurons" (Prince, 1910a, p. 175). This record is commonly called "the unconscious." The dream expresses the previous thoughts and experiences of the dreamer in symbolic form. Dreams are more than merely a patch work of previous memories, however. They have "a logical and intelligent design" (Prince, 1910a, p. 175). This design is reflected by the fact that there often appears to be a motive going through the content of dreams, similar to that of a story constructed in a drama. Dreams seem to sometimes *have a plot* "as if an intelligence other than that of the consciousness of the dreamer had planned the development and foresees the outcome" (Prince, 1910a, p. 196).

Furthermore, Prince argues that dream phenomena are similar to other dissociative phenomena in which subconscious (or, in psychoanalytic terms, "unconscious") processes become manifest in conscious experience through symbolism. Examples include hallucinatory phenomena accompanying religious conversions and post hypnotic suggestions. Dreams do not appear to be unique in this regard. They represent one class of hallucinatory symbolism.

Through his method and study of dreams, using what he believed to be free association, with additional information provided by memories retrieved in dissociated states, Prince was not able to confirm certain basic tenets of psychoanalytic dream theory. He found no evidence of repression of ideas, of a censoring mechanism, of compromise formation, or of the imaginary fulfillment of infantile sexual wishes. He viewed the amnesia following dreaming to be similar to the amnesia commonly found for dissociated states in general. In summary, Prince viewed dreams as dissociative phenomena, similar to other dissociative phenomena. The dream results from sets of ideas or recent sensory experiences (especially those occurring in the pre-sleep stage and in the day preceding the dream). These ideas recur again in the dream, not as thoughts, but in symbolic representation. Neurograms (i.e. conserved memories) reflecting these

thoughts and themes in the (Ircaner's life stimulate associated thoughts strongly related to the fundamental dream thoughts (motive). The subconscious (unconscious) process responsible for dream formation weaves together the original thoughts and associated thoughts into a dream consciousness whose format is a dramatic scene. This dramatic representation symbolically conveys the dreamer's ideas and consists in part of "sensory hallucinations" and in part of thoughts.

Why the particular action of the dream is manifested as it is remains unknown. Prince does not arrive at an answer that he feels is satisfactory. If the unconscious process reflects a thinking consciousness, he argues, then, if the observer knew what this unconscious process was thinking about during the dream, one would know why the dream was as it was. If the unconscious process is determined by a "brain process" only, then one would still need to know the laws of this brain process's functioning to answer the question.

Prince does suggest however that dream interpretation based on these views may have therapeutic value in the treatment of hysterical patients. He suggests that stigmata of hysteria may be regarded as the symbolic manifestation of ideas from which they originate and which continue to exist subconsciously. These ideas may potentially be manifested in dreams.

Ernest Jones (1910) subsequently replied to Prince's study and conclusions. He was harshly critical and argued that Prince had not used the psychoanalytic method of free association properly, and "that *far* deeper memories can be recovered by psycho-analysis than by hypnosis...." (Jones, 1910, p. 332), Prince had not come to Freud's conclusions about the meaning of dreams because he had not used the psychoanalytic method properly.

Prince (1910b) replied in defense of his approach and accused members of the psychoanalytic school of loose reasoning in the interpretation of facts and of a lack of broad experience with psychopathological conditions. He argued that psychoanalytic efforts were often characterized by dogmatism rather than by careful exploration.

This type of exchange may have been similar to what Ellenberger (1970) has termed the "polemics" associated with the early days of the psychoanalytic movement.

C.G. Jung (1961), who was then a member of the psychoanalytic movement, was also critical of Prince's study, arguing that Prince left the reported dreams unanalyzed. Wish fulfillment and transference phenomena, Jung argued, were not discussed by Prince although they should have been. He, too, claimed that Freud's theory was unharmed by Prince's repudiation.

What Jung would have said about Prince's study at a later date is not known. Several years after writing this paper (Jung, 1961), he left the psychoanalytic movement and formed the school that he termed "Analytical Psychology." While his own dream theory, to be described briefly below, went much further along certain theoretical and clinical dimensions than Prince's study would allow, his later views on dreaming do appear to fit, at least partly, within a dissociation framework.

Jung was an early follower of Freud who had also studied

with Janet. Although the influences on his psychological theory and on his view of dreams, as expressed in the theoretical framework of Analytical Psychology, were varied, his understanding of the meaning and function of dreams does seem to fit, at least partially, within the framework of dissociation theory. This is not surprising considering Jung's personal background, interests, and experiences as described by Jung (1963), himself, and by Ellenberger (1970), who chronicles the history of dynamic psychiatry and the lives of its early major figures. Jung was the son of a pastor, and was deeply interested in religious and mystical phenomena. As a young man he joined a group which was involved in spiritistic experiments. Jung's own cousin, a 15 year old girl, was the medium for the group. She was reportedly prone to episodes of mediumistic somnambulism. This experience became the basis for Jung's medical dissertation.

During Jung's own period of what Ellenberger (1970) calls his "creative illness," Jung developed methods of relating to personified unconscious figures and conversed with personality aspects who became conscious to him through his methods of forcing his imagination to extremes and drawing out his dreams. For Jung, the psyche was composed of a conscious ego component and of unconscious components, personified in dreams, visions, and other phenomena to which the individual must learn to relate. Ellenberger (1971) compares Jung's split-off contents of the unconscious to Janet's concept of subconscious fixed ideas.

Dream interpretation, according to the Jungian approach (1954, 1960, 1964), will link he reviewed briefly and in certain aspects here. An emphasis will be given to those parts of the theory that relate to dreams as presumably reflecting the workings of an unconscious component of the psyche which has an independent intelligence and awareness, distinct from ego consciousness.

Jung believed that dreams are prospective and adaptive in nature. They express, in metaphoric terms, the statement and message that is conveyed within the structure of the dream. There is no attempt to disguise unconscious content or to distort meaning. Indeed, in direct contradiction to Freud's view, the dream, as a reflection of an unconscious, autonomous source, stands in a compensatory relationship to consciousness. It is the responsibility of the conscious *ego* to try to understand the meaning of the dream and to develop a relationship to what is related through the dream in its own metaphoric and symbolic language.

Dreams can and should be understood on the manifest level. Dream interpretation proceeds through a number of levels, but almost always involves an acceptance of the manifest content as making a statement about the dreamer, him or herself, or his or her situation. Like a story or drama, the dream proceeds to develop a theme with a conflict and then a resolution. The elements of the dream can be understood through amplification and limited association. Information based on wide readings in religion, mythology, fairy tales and the like are often helpful in interpretation, since the themes found in an individual's dreams are often the same or similar to those found in religious or mythological texts.

The dream, as a reflection of an unconscious source, should be used to help the dreamer in his or her own

individual development. Jungian theory does not accept the notions of censorship, disguise, or distortion in dreams. Extended free association is not used in dream interpretation since this approach may reduce the benefits of the dream for the dreamer (e.g., in prospective and adaptive dimensions). For Jung, free associating to any of a number of images or ideas can lead to unconscious complexes. Dreams do not provide a unique or special approach in this regard. Early childhood experiences are also not emphasized in the interpretation of the dream or as antecedents of particular dream elements unless the dreamer's associations bring these up.

While space does not permit a full discussion, Jung's approach has been influential for a number of modern non-Jungian theorists, such as Ullman (Ullman & Zimmerman, 1979) and Fosshage (1983). Ullman has argued for the demystification of dream interpretation, dream work in groups, and the dream as an aid in achieving social connectedness. Fosshage (1983) has elaborated on and contributed to the concept of the self state dream, which bears considerable resemblance in certain aspects to Jungian approaches to the dream.

DEFINITIONS OF DISSOCIATION

Pierre Janet is said to have first used the term "dissociation" (Ellenberger, 1971). Janet described hysteria as *"a form of mental depression characterized by the retraction of the field of personal consciousness and a tendency to the dissociation and emancipation of the system of ideas and functions that constitute personality"* (Janet, 1929, p. 332. Italics in original).

One of the difficulties in studying dissociative phenomena and dissociation theory has been the frequent confusion about the definition of dissociation and its relationship to other terms, such as repression, used in mental health theory (Bernstein & Putnam, 1986).

The current Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association (DSM III-R, 1987) considers the essential features of dissociative disorders to be "a disturbance or alteration in the normally integrative functions of identity, memory or consciousness" (American Psychiatric Association, 1987, p. 269).

Young (1988) defines dissociation as "an active inhibitory process that normally screens internal and external stimuli from the field of consciousness" (p. 35). In pathological conditions, dissociation eliminates painful memories from consciousness. In normal circumstances, dissociation is nearly always present, screening out irrelevant stimuli, thus aiding the integrative functioning of the ego.

Braun (1984, 1988) has conceptualized dissociation in what he terms a "BASK model." The letters BASK stand for "Behavior," "Affect," "Sensation" and "Knowledge." These characteristics or processes are usually considered to be united over time in the normal individual. Dissociation may be defined as "the separation of an idea or thought process from the main stream of consciousness" (Braun, 1988, p. 5). Using the BASK model, Braun notes that dissociation may occur on one or more of the four levels (behavior, affect, sensation or knowledge) at a given time, while being congru-

ent with the other components at other times.

Within this BASK framework, for the purposes of this paper, dreams can be seen to fulfill the criteria of dissociative phenomenon, although they would not be considered abnormal. Sleep, whether or not it contains remembered dreams, serves as an interruption in the usual stream of consciousness over time. Furthermore, during the dream state, all of the BASK components, as remembered by waking consciousness, may be distorted and/or separated from their usual states in the normal stream of waking experience. Sensation of self, for example, based on the dreamer's later report, may have little continuity with the consciously experienced sense of self. Changes from ongoing, expectable, stable, behavioral, affective and knowledge (memory experiences are all common.

DREAMS IN THE FRAMEWORK OF DISSOCIATION THEORY

The value of considering dreams within the framework of dissociation theory rests not only on the possible validity of such a position, but also on whether such an approach aids in the understanding of other phenomena, dissociative or not, and whether it serves as a stimulus for additional theoretical, clinical and research efforts related to dreams and dreaming. Michels (1983) has argued in another context that the value of theory building resides in the ability of new theories to generate additional relevant ideas, approach, etc. While dreams have long been felt to have dissociative characteristics by some theoreticians (Hilgard, 1981), there does not appear to have been a recent effort to place them within modern dissociation theory, as defined earlier.

Perhaps one reason for this rests with the historical lack of a clear theoretical or clinical framework for the interpretation of dreams that is widely felt to be consistent with dissociation theory, although, as I have argued, the Jungian view has several aspects that may be considered within a dissociation framework. The classical psychoanalytic interpretation of dreams emphasizes repression, censorship, and conflict among agencies within a relatively more unified system of mental processes than seems acceptable to or compatible with a dissociation based theory of dreaming.

Dreams, however, are now being increasingly understood as beneficially interpretable according to what previously were totally unacceptable lines in classical psychoanalytic thought (Fosshage, 1983; Eisnitz, 1987; Glucksman & Warner, 1987; Ornstein, 1987). These new conceptualizations may also facilitate the dream's being understood within dissociation theory (Gabel, 1989). Current conceptions of dreaming emphasize the legitimacy of the manifest content of the dream as a metaphoric, symbolic statement of the actual state of the individual and/or his or her psychological condition or problem. Current views of dreaming often also emphasize that the manifest dream proceeds, in the manner of a drama or story, to describe the dreamer's previous attempts to deal with a specific and focused conflict, problem or situation which may be internal, external (or frequently both) in the dream. At times, potential solutions or adaptations are also depicted symbolically and metaphorically in

the dream; i.e., problem solving may occur.

Despite variations based on theoretical differences, when dreams are viewed within the broad phenomenological outlines noted above, they suggest certain theoretical approaches, questions and problems which I believe can be placed within and addressed by dissociation theory.

In the remainder of this paper, I will briefly describe several areas in which I believe the study of dreams may be enriched by or contribute to a greater development of dissociation theory. These dimensions (which often have considerable overlap) include: dream theory and dream research, developmental psychology and psychobiology, brain-behavior relationships, learning theory, dissociation theory and dissociative phenomena, psychoanalytic theories, and other areas of study.

1. *Dream theory and research on dreams*

The description of dreams along the phenomenological lines noted earlier reduces or eliminates a variety of problems created by the psychoanalytic model. These include the difficulty of studying or confirming on an empirical level such constructs as the censorship function, latent content, and infantile sexual wishes. While dreams, when accepted on a manifest level, also present difficulties for research, these difficulties appear more manageable empirically. Approaches to dreams aimed at defining thematic content, semantic structure, imagery, shifts in focus, etc. have all been made empirically and discussed in an extensive literature.

Yet, the manifest content, phenomenological approach that is more easily studied empirically, and which is viewed within a nondistortion framework, and as an accurate portrayal of psychological processes or of the state of the self (Fosshage, 1983; Ornstein, 1987) has a number of theoretical and empirical difficulties also.

Briefly, the psychological truth, accuracy, or validity of the dream's description of self has been striking to many observers. Ullman (Ullman & Zimmerman, 1979) likens the portrait of the dreamer in the dream to what appears to be an image of him or herself taken by a camera far away in space. What are the psychological processes or mechanisms that enable such a strikingly "accurate" psychological picture of the dreamer to be displayed? How is the dreamer known with such accuracy, given the frequent defensive and distorting operations present in psychological life? Furthermore, how is it that potentially adaptive solutions and problem solving may go on in dreams when solutions to problems were not (or were not yet) apparent in the conscious life of the dreamer? Since Freud (1953, 1961) deemphasized problem solving as a function for dreams, traditional psychoanalytic dream theory did not have to actively address these types of questions.

Dissociation theory may be able to address these issues, however. If dreams reflect a dissociated state within the individual, then interruptions or dissociations from the usual stream of consciousness in behavior, affect, sensation, or knowledge (the BASK system [Braun, 1988]) would not be unexpected. Indeed, feelings of strangeness, unreality, looking on oneself in the remembered dream from outside the point of view of usual waking consciousness would not be

surprising. The dreamer, in usual waking consciousness, viewing himself or herself in the remembered dream, as if from a point in space or outside the system, might be thought of as having an experience similar to depersonalization or splitting in the continuity of the usual stream of personal internal sensation of self, as described by Braun (1988) within the BASK system.

Providing an appraisal of the dreamer (dominant personality) which is broadly based and apparently psychologically accurate and valid, can also be understood within dissociation theory. In this case one might consider as an analogy the various psychological functions of subpersonalities, including the internal self helper, who has broad knowledge of the dominant personality and can help it achieve valuable goals (Allison, 1974).

I do not wish to suggest that only dissociation 'Icon' can address these issues presented by what is emerging as a broadly based view of dreams that emphasizes the manifest content of the dream, its accurate or valid description of the dreamer psychologically, and the description of possibilities available to the dreamer. I have suggested other approaches to understanding these phenomena elsewhere (Gabel, 1989). What I do suggest is that dissociation theory provides possible approaches to these questions on both theoretical and clinical levels.

2. *Developmental psychology and psychobiology*

Dreams are most commonly reported from REM sleep (Gaillard, 1983), and in a complete discussion of dreams, the association of dreams and REM sleep must be noted. As will be amplified later in the sections on brain-behavior relationships and learning theory, REM sleep itself comprises a distinct phase within the sleep cycle, and it is through its possible association with dreaming in relation to learning, problem solving, etc., that one aspect of the case for dreams as possible dissociative phenomena is strengthened.

From a developmental perspective, the characteristics of REM sleep change over the life cycle, going from about 50 percent of total sleep in the human infant to about 20 to 25 percent of sleep time in the adult individual. There have been a variety of theories related to the function of REM sleep that *cannot* be reviewed here (see Pearlman, 1982). Jouvett's (1975, 1980) work is of some interest in the context of REM sleep and possibly dreaming as dissociative phenomena, however. Jouvett has performed experiments with cats, in which there has been stereotaxic destruction bilaterally of part of the nucleus locus coeruleus, thus selectively suppressing the motor inhibition of REM sleep. Jouvett argues, based on his studies in which the still "sleeping" cats display dramatic and stereotyped behavior at a time when they would be expected to enter into REM sleep, that REM sleep seems to organize or program "genetically constituted or instinctive behavior" (Jouvett, 1975, p. 500). In *another* context, Jouvett (1980) has also argued that REM sleep may function to select particular genetically programmed behaviors, that is, to aid in the maintenance of variations in behavior.

It does seem; in the experiments described by Jouvett, that the cats, although maintaining characteristics of sleep, have been acting in concert with internal visual stimuli, i.e.

perhaps dreaming. Jouvett (1973), in fact, does not distinguish between dreaming and paradoxical or REM sleep. Schenck, Bundlic, Ettinger, and Niahowald (1986) have described human behavior in concert with dream imagery in a small group of patients who *have* neurologic dysfunction and who no longer exhibit the usual motor inhibition characteristic of REM sleep. Whether dreams work in association with developmental changes in REM sleep to program or re-program behavior for life span changes needs further study.

3. Brain - behavior relationships

There have been numerous reports (Putnam, 1984; Coons, 1988) describing biological, psychometric and psychological differences between dissociated personalities in multiple personality disorder. There has, of course, been longstanding interest in defining biological correlates or substrates for mental processes. There is currently very active interest in defining biological variations that discriminate among normal abilities (e.g., verbal and visual abilities) and between psychopathological states or between psychopathological states and non psychopathological states.

In recent work I have reviewed evidence that bears on the question of whether there is a relatively increased right hemispheric activation or efficiency in imagery, hypnosis, REM sleep and dreaming (Gabel, 1988a). This is a controversial area. While some evidence supports this view in REM sleep and dreaming (Gabel, 1988a), Antrobus (1987) and others have cited evidence contradicting this position.

There is also controversy around the notion of a relatively increased activation or efficiency of right hemisphere involvement in hypnosis and in imagery, but considerable support for this view exists as well (Gabel, 1988a).

Defining dreams as possibly existing within the framework of dissociative phenomena and dissociation theory should facilitate the study of dreams (or REM sleep) in comparison with various dissociative states since dissociation theory offers the model of *distinct states* (e.g., hypnosis) which have been and continue to be described psychologically and biologically (Putnam, 1988).

4. Learning theory

Some recent attempts to conceptualize behavioral, emotional and cognitive changes in dissociative disorders and dissociative states have focused in part on the concept of state dependent learning, which itself is related to neurophysiological changes during different states (Braun, 1984, 1988). In this view, memories, learning capacities, and informational systems *may* vary within the individual, and depend on his or her current state. In the case of patients with multiple personality disorder, particular personality characteristics would depend on the learning history of the dominant personality and particular subpersonalities. This view deemphasizes the psychological construct of repression and emphasizes state dependent learning to help explain the capacity for incorporating, integrating, and acting on given types of information.

Dream theorists such as Breger (1967) and Greenberg (1980, 1987a), over the last generation, have cited experi-

mental evidence from studies with dreams and REM sleep to support the view that dreaming is associated with possible problem solving or adaptational efforts. There is an extensive literature in both animals and humans describing experimental evidence that is in general supportive of REM sleep's role in learning and memory, especially (in humans) as related to emotional issues. It should be noted that there is less experimental evidence supporting a role for dreaming per se being related to learning and memory. Yet, the clinical theories of writers such as Jung, Ullman and Fosshage who have emphasized the manifest dream's description of the state of self, adaptations of the self, and problem solving approaches reflected in the dream, do seem to fit well on an intuitive level with the empirical results of studies on the function of REM sleep.

Rosenberg (Rotenberg & Arshovsky, 1979; Rotenberg, 1984, 1988) has contributed an interesting theory to the literature which is illustrative of the potential for viewing REM sleep (and dreaming) as one state which complements another state (usual waking consciousness) in problem solving or learning capacities. On the basis of experimental work of his own with humans and animals, as well as the work of others, Rotenberg suggests that REM sleep and usual waking activity are in a compensatory relationship around the issue of "search activity." With its usual activities, waking behavior may become associated with a cessation of searching (for solutions, adaptation, etc.). REM sleep *is*, on the other hand, associated with "search activity." in states such as depression, conscious waking life has a relative "cessation of search." REM sleep then increases to compensate for this absence of search activity.

Dissociation theory's interest in state dependent learning (e.g. during hypnotic suggestion) and physiological changes during states seems to relate well to these approaches to REM sleep (and possibly dreaming), and may enhance and broaden our conceptions of the role of dreaming in learning and problem solving.

5. Dissociation theory and dissociative states

As noted earlier, there has been a dearth of experimental work supporting essential concepts of traditional psychoanalytic dream theory. Rating scales that are empirically based have now been developed that can be used to assess individuals who are felt to possibly have dissociative disorders and to compare individuals with dissociative disorders and other conditions (Bernstein & Putnam, 1986). Reviewing items on such scales from the point of view of dream experience suggests that dreams may fit within a dissociation framework using these types of experimental tools, but this hypothesis must be tested empirically.

In addition to the theoretical interest now taking place within the field of dissociation regarding state dependent learning and physiological changes attendant on states as possible correlates of dissociative phenomenon, other work *is* progressing on the characteristics of the switch process between states (Putnam, 1988). This is an area that bears on the problem of shifting behavioral and psychological experiences of individuals with dissociative disorders. It relates to state dependent learning and possibly to the amnesia for

different states exhibited by individuals with dissociative disorders. Shifts between stages of sleep, as is often the case in patients with multiple personality disorder, occur quickly. There are defined biological criteria (e.g. electroencephalographic, electrocnographic) that reflect change of stage characteristics to REM sleep, NREM sleep and waking conditions. Dreaming, as a frequent concomitant of REM sleep, may be thought of as possibly exhibiting state shifts comparable in that regard to what may often be found in dissociative disorders (and at times in other conditions).

Theorists and clinicians involved in the study and treatment of dissociative disorders and dissociative states must of necessity define common characteristics or unifying features of these conditions. Phenomenological and behavioral similarities between dissociative disorders and dreams are apparent (e.g., depersonalization, paralysis of movement, feelings of unreality). Another characteristic of dreams, emphasized by Rechtshaffen (1978) has been mentioned earlier as providing some phenomenological similarity between dreams and dissociative phenomena. Rechtshaffen emphasizes the "single mindedness" of dreams, their characteristic focus on one main theme. Dissociative states, such as subpersonalities in multiple personality disorder or in hypnotic states, are often described in a similar manner, as having a rather narrow, but focused thematic content. A thorough comparison of dreams with various dissociative phenomena, both those with known biological changes accompanying psychological state changes, and those currently defined on the basis of psychological state changes alone, such as depersonalization when neurological dysfunctions (e.g., right temporal abnormalities) have not been identified, is warranted.

Dissociation as a mental process has commonly been linked with psychopathology, thereby possibly limiting its contribution to the development of a broader theory of mental organization. The origins and growth of psychoanalysis as a theory of mental organization rested not only on insights gained from psychologically disturbed individuals, but also from insights gained from and applied to an understanding of normal individuals' behavior. In *The Interpretation of Dreams*, Freud (1953) emphasized that he used examples of dreams from normal individuals (including himself) to avoid the criticism that the principles necessary for an understanding of dreams that he put forth applied only to the dreams of individuals with psychopathology. One of his goals was the development of psychoanalysis as a broadly applicable theory of mental organization. Dreams, a normal phenomenon, became a vehicle to understand mental processes according to psychoanalytic principles that could be applied to everyone. Indeed, such was the importance Freud attached to his own work with dreams for psychoanalytic theory building that he continually returned to the *Interpretation of Dreams* when he felt uncertain about particular theoretical questions. Clinical, theoretical and experimental work with dissociative disorders and dissociative has led some workers in the field to argue that dissociation theory' may also have value in the development of a broader theory of mental organization (Beahrs, 1982; Watkins & Watkins, 1979-1980).

The arguments put forth in this paper that dreams may be viewed from the perspective of dissociative phenomena bear on questions of whether dissociation may be conceptualized as both a normal and an abnormal process, and whether the concept of dissociation has value in the development of a theory of mental and personality organization. These questions are in part questions of definition and of emphasis. Several definitions of "dissociation" have been given earlier. There is no uniformity about the definition of dissociation when applied solely to pathological processes or when applied to situations in which dissociation also might be considered a normal phenomenon. The main focus of the arguments presented in this paper relate to this latter question; i.e., whether the concept of dissociation may beneficially include a consideration of normal phenomena. Clearly the thrust of this paper is to argue in the affirmative. There is considerable support for this position.

Van der Hart and Friedman (1989) and Van der Kolk and van der Hart (1989) emphasize the value of understanding the concept of dissociation from a broad perspective that includes normal psychological processes, thus potentially contributing to the study of phenomena such as memory processing, state dependent learning and adaptive reactions to psychological stresses and conflicts. Current concepts of information processing in REM sleep (Pearlman, 1982) and in dreams (Gabel, 1987) have been noted earlier and also seem supportive of a "dissociation as normal phenomenon" concept. A broader neo-dissociation framework for understanding certain mental processes in normal individuals has been proposed by Hilgard (1986), based in part on his work with the hidden observer phenomenon. Psychological studies with post commissurotomy patients have demonstrated parallel processing of information after surgical sectioning of the corpus callosum (Sperry, 1968). Studies of this type with "split brain" patients have led Gazzaniga (1985), a major researcher in the field, to develop a theory of mental organization in which one language dominant, organizing, interpretive component of the brain constructs theories to explain attitudes, reactions, and behavior sometimes originating in other parts of the brain that would otherwise be inexplicable to it. For Gazzaniga (1985), the brain's normal organization is into modules that function in parallel in a co-conscious system with one verbal and other non-verbal components, a view that seems quite compatible on a psychological level with a broad definition of dissociation as a normal process that involves both parallel processing and "screening" functions (Gabel, 1988a).

Yet, despite the suggestions implied by these various approaches that dissociation theory might beneficially include normal processes and have utility for the further development of a theory of mental organization, there is no proof or evidence in a strict sense that dissociation as a concept should be broadened. The linkage which is suggested in this paper between dreams and dissociative phenomena has been argued on historical, phenomenological, conceptual, and empirical levels. Through the use of rating scales to assess dissociative experiences and ongoing research defining and comparing dissociative and non dissociative conditions, this hypothesis can be further clarified empirically and

the presence or absence of relationships established, but in the end the question may be as much theoretical and conceptual as empirical in nature.

6. *Psychoanalytic, and other theoretical and experimental work*

In the 1911 edition of *The Interpretation of Dreams* Freud (1953) criticized Prince's (1910a) discussion of the mechanism of dream formation cited earlier because of the lack of a dynamic explanation to account for dream production. Indeed, dreams understood within the framework of normal dissociative phenomena suggest that the psyche may have autonomous or potentially autonomous components which may not relate to one another on the basis of conflict or defensive operations. This view challenges certain additional psychoanalytic concepts, but does not necessarily refute psychoanalytic concepts such as defensive operations, repression, and conflict as theoretical constructs within states or within the dream's mentation itself. It does suggest, as pointed out by Braun (1988), in the explanation of his BASK model of dissociation, that a crucial difference between the concepts of repression and dissociation may be time. Lapses in the experience of the passage of time occur in complete dissociation whereas there is continuity in the perception of time when repression is operative. Dreams as normal dissociative phenomena, might also be described as experienced mental phenomena or states separate from the stream of usual conscious awareness.

Prince (1910a), in discussing the mechanism of dreams, comments that "crystal gazers," also demonstrating dissociative phenomena, sometimes picture themselves in the crystals, much as the dreamer remembers himself or herself pictured in (or verbalizing in) the dream. One aspect of dreams, as described (if not exactly articulated as such) by theorists such as Jung, Fosshage and Ornstein, seems to be the ability of the psyche to monitor itself. There are of course possible dissociative and non dissociative theoretical constructs to understand this process (Gabel, 1989). The study of dreams within the context of dissociative phenomena may enhance the study of self monitoring and self visualization phenomena.

SUMMARY

Dreams have a long standing history of being considered dissociative phenomena and likened to other dissociative phenomena. Traditional psychoanalytic theory has described dream structure and function within a psychoanalytic model. There has been a recent increase in interest in dissociative disorders and the concept of dissociation from experimental, theoretical and clinical viewpoints. This paper reviews psychological attempts in the modern era to try and understand dreams from what the author suggests may be considered a dissociation perspective. It then discusses characteristics of several current dream theories and argues that dreams, as now understood in some psychoanalytic and non psychoanalytic orientations, may also be understood within the framework of dissociation theory. Various areas whose understanding and study may be contributed to or enhanced by considering dreams within the context of dissociation theory

are discussed. ■

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