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### Content

This supplement of the International Journal of Dream Research includes the abstracts of presenters who gave consent to the publishing. The abstracts are sorted according to the last name of the first presenter. Affiliations are included only for the first author.

## Dreaming the bite - Twilight states in Tarantism

Fulvia Adriano

Rome, Italy

Salentine Tarantism is a relevant topic of study since the Middle Ages. Its characteristic choreic syndrome has been attempted to be explained by two main hypotheses: the bite of "tarantula", an undefined species of venomous spider, or a more general mystical and magical cause. However, both of them were lacking and inconclusive and thanks to Ernesto De Martino's fieldwork in the late 50s of the past century, a further hypothesis has been proposed taking into account the ethno-anthropological, cultural, historical and psychopathological aspects of Tarantism.

Specifically, one of the most intriguing features of Tarantism was the regular occurrence of a choreic syndrome leading to twilight states of consciousness. During the latter, the supposed "victims of the bite" – especially young women from farming villages – could essentially act their own internal conflicts. Indeed, as an altered state of consciousness, twilight states allow, similarly to dreams, to depict and express personal emotive dimensions, conflicts, representations, etc.

As reported by De Martino, the symbolism related to the tarantula and the relative ritual exorcism, was the only chance for these women to express their own deep conflicts engendered by an unalterable condition of poverty which did not allow the possibility to live as free to choose human beings. Moreover, representing and acting their conflicts by the means of "socially accepted ways" prevented from damaging breaks with the tradition and with the community the victims belonged to. Therefore, this peculiar solution to personal internal conflicts could guarantee social support as well as social balance within the community.

# The Soul's Hands: Images In Action In Dreaming And Sandplaying Analysis

#### **Giuseppe Andreetto**

Sassari, Italy

The experience of sandplaying analysis is an integration of sensing, intuition, seeing and imagining: the sandbox, as a

part of the entire analytical setting, is the clear border of a relationship in which dreams' and sandplays' images can be touched with our hands and find their own body. These images are alive and able to recognise us and then immediately return that contact. This process opens a communication betwen the conscious and the inconscious.

Our hands and their psychic equivalents will be involved in a contact with the matter, either as a primary element, or as a landscape of scenes and characters which will be built in more advanced levels and discovering, therefore, the "when", "where", "why", "how" and "who".

C.G. Jung was sure of our "hands' ability to discover and explain all those secrets that our intellect is desperately "hustling with".

I would like to share with you a dream and a sandplay that have been part of my personal analysis. Our interest will be pointed on the primary structure of dreaming and sandplaying images: the experience of the analysis, from this perspective, catalyses an integration of body and mind and the structuring process of symbolic images. What happens is that the real images we normally see will be underlined by the archetypical areas. This process is a creative integration between seeing and imagining that will allow us to regain a lost orientation and resume our way.

### Tell me how you dream

### Bruno Bara

University of Turin, Italy

The basic idea underlying this study is that dreams are the expression of contents that are primarily somatic and emotional and belong to the mind of the dreamer, but which are not fully explicit in his consciousness.

The source which gives rise to dreams is exactly the same as that generates emotions. We may be conscious of our emotions, or we may be on the point of becoming aware of them, or they may be difficult to become aware of, or they may have been carefully blocked to prevent us from becoming aware of them. Furthermore, dreams may be clear or incomprehensible to different degrees. Thus interpretation as I see it is an attempt to discover a physical and emotional world which liberates itself from the bonds of rationality. The difficulty of understanding dreams lies precisely in the fact



that they do not employ the codes we usually employ, the schemata which consciousness imposes upon the world and upon ourselves.

The theoretical framework I will work within is that of the cognitive neurosciences, which will provide us with our stable reference point to indicate the direction our project is to take.

Understanding the meaning of a dream is no banal process and tradition says that an expert, someone who is competent in interpreting oneiric creations, must be called on. The presence of another person, above all if she is gifted with the charisma that is indispensable to interpreting dreams, has a dual function: technical and symbolic. The technical function consists in widening the dreamer's subjective mental space, enriching it with the knowledge and the emotions which the interpreter make available to the dreamer. Two distinct individualities work within a shared mental space, a space which emerges in a conversation when it is well conducted.

The symbolic value derives from our being exquisitely social animals, since we consider sharing experience as being a very important and special way of achieving deeper understanding of that experience: any event becomes more significant if shared with another person, experienced with her or even simply recounted to her. When comprehension is facilitated by an expert, a dream immediately becomes noteworthy, saved from that oblivion which engulfs our solitary memories.

## Conscious And Unconscious Dream-Like Properties Of Giorgione's "Tempest"

Umberto Barcaro and Marco Paoli

University of Pisa, Italy

The creation of Giorgione's "Tempest", a masterpiece of the Venetian Renaissance painted at the beginning of the 16th Century, involved three consciousness modalities connected to the phenomenon of dreaming. In fact, (a) the purpose of the painting was to represent a dream; (b) the author consciously concealed this point; (c) he unconsciously created a manifold pattern of dream-like features that characterize the painting. These modalities were interconnected with each other.

An impending storm is the central item of the painting, which also includes: a tortuously flowing stream, a town (identified as Padua), ancient monuments (identified as monuments in Constantinople, Paoli 2011), a naked young woman nursing a child, and a richly dressed young man holding a staff.

The monuments in the painting refer to two episodes: an earthquake devastated Constantinople in 1509, killing more than ten thousand people (however, all the Venetians that were there were unharmed); towards the end of the same year, the forces of the League of Cambrai besieged Padua.

A conscious purpose of Giorgione was to represent the dream had by Lucius, the first character of Apuleius' "Metamorphoses" (Paoli, 2011): after having turned himself into an ass by mistake, Lucius had the vision of Isis, the savior goddess, inviting him to be initiated to her cult. The author voluntarily concealed this purpose not only for political reasons, but also for artistic purposes. The "Tempest" presents significant dream-like properties. It establishes a link between the Constantinople earthquake and the siege of Padua. A heuristic rule can often explain the links between dream sources: they are such as to reverse negative situations into positive. If this criterion is applied to the "Tempest", the following implication is obtained: in the same way as, in the case of the earthquake, none of the Venetians were killed, the war against the League of Cambrai will be successful for the Venetians.

Both the young woman and the young man have the inner knowledge that no danger actually exists. They offer a remarkable example of dream-like "condensation". The young woman (a) is Isis, (b) is the archetypal Mother Earth, (c) has a determined physiognomy, (d) can be interpreted as a gipsy. The young man (a) generally represents the Venetian nobles, (b) is having a day-dream, (c) is a precise person, possibly the commissioner. Furthermore, the painting implicitly suggests both a mother-child relationship and a love relationship between them.

The stream provides figurative dream-like self-similarity at different scales: (a) it divides the composition into a part including the dreamer and a part including the dream vision; (b) its flowing from a distance suggests the flowing of time; (c) its bending contributes to the general atmosphere of calmness, despite the impending storm.

Considering that the results obtained examining a recognized masterpiece can have a more general validity, this study suggests that the dreaming phenomenon plays an important role in the mostly unconscious processes involved in both the creation and the fruition of art.

## Transformation-Dreams And The 7 Stages Of Consciousness

## Ann Bengtsson

Vestfossen, Norway

Mystics from many cultures have during time described their spiritual development and experiences. In this speech I will describe the transformation-process and different stages of consciousness by the help of icons and examples from among others Theresa of Avila and the Tibetan Dzogchen tradition. I will also give examples from my own dreams, using the knowledge of the subtle anatomy of man and Jung's terminology. In a transformation-process the ego gradually moves into the background, leaving more space for the self to unfold and even moving beyond the self, ending up with non-duality. I will also suggest essential methods to work with in a transformation process, such as body consciousness, breathing, heart contact, apperception/meditation and creativity.

# The use of Dreams as an Instrument For Diagnosis and Treatment in Psychodinamic Psychotherapy

#### Cristina Bottoni

#### Rome, Italy

Background: Historically, the significance of dreams has been explained in psychoanalysis, depth psychology and gestalt therapy. There are many guidelines in analytic psy-



chology that help therapists to integrate a basic approach to dream interpretation into clinical practice. Recentely cognitive constructivist psychotherapists, particularly those working at the intersection of cognitive therapy and other therapeutic traditions, have found a new interest in dreams which opens new prospectives of using dreams in psychotherapy and in clinical practice. The integrated model of psychotherapy is the most suitable to use dreams in a modern way, and neuroscience have revelated once again at the forefront of this renewed interest on dreams.

This work based on the Integrated Psychodinamic Psychotherapy (IPP, in ita. PPI) method, incorporated dreams from the early stages of therapeutic relationship as an instrument for assessment of aetiology, the psychotherapy process and the outcome of treatment. An empathetic approach to dream allows to overcome the issue of double track between manifest content and latent content, linked to Freud's theory of instincts. The only element to be discovered is the latent unconscious thinking of the dreamer, expressed with the dramatization of the dream and three basic parameters: Narrative plan, Aesthetic expression, Affective Component. Thus, the dream proves material expressive personality and its organization, and process for the mentalization and cohesion of the self.

Method: This work describes the use of dream in psychotherapy and is essentially based on clinical observations. I first observed different kind of dreams in my patients during their psychotherapy, then these hypotheses were confirmed not only by the clinical material brought by my patients, but also by colleagues and supervisees.

Results and Conclusion: Dreams can reflect a patient's aetiology, needs, illness prognosis and psychotherapy outcome. Dreams are an instrument for the diagnosis, research and treatment of mental disturbances in a clinical setting.

We need to formulate more precisely which are the clinical criteria in dreams which could be recognised more easily by psychotherapist, because opinions vary considerably from one psychotherapist to the other.

## Dream distortion as intrapsychical meta-communication

Paolo M. Clemente

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The dream is an analog communication including both messages and meta-messages; the messages are directed to the dreaming conscience, the meta-messages to the memory of the awake state. The author proposes to set aside the message contained in a single dream and to focus on the meta-message present in all dreams and allowing us to distinguish them from reality. The dream distortion transmits the meta-message that is used to mark the difference between a dream and the waking world. In fact, through systematic differences between dream and reality, the dream sends the meta-message "I'm a dream" to the memory. The dream distortion has the adaptive functioning of not confusing the autobiographical memory of waking life with false memories. The ordinary dreamer ignores the meta-message, while the lucid dreamer becomes aware of it when the dream is still in progress. Awareness of dreaming is a good antidote for nightmares but it makes the interpretation of

dreams tricky because it changes the emotional experience of the dreamer and interrupts the course of analog thinking this being the message of the dream.

## The Level Of Agreement And Position On The Bishop Grossetete Scale Should Determine The Dream Content Variability

John M Corbett

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Symmetry is a series of harmonious and balanced proportions, an open reflex to include other transformations too. An opinion is a subjective viewpoint result of uncertainty and emotional interpretations of most likely unsubstantiated information. Symmetry vs. opinion is like agreement/disagreement components of a dialogue developing between definite limits. Symmetry can be simple linear, rotational, helical, or more advanced translational glide reflexion or rotorreflexion symmetry that does no longer bend along a folding line. The DNA (deoxyribonucleic acid) is of a non-repeating helical symmetry.

The personal vs. general appearance is a constant attribute of the living organism. In their dynamics of changes, the symmetry is used to support the concept of classification. Most of earliest organisms are only an opinion. They lack symmetry. The next branches of the organisms scale did develop rotational symmetry; radial arrangements of body parts, cylinder around an axe, rays radiating from the mouth or spherical pollens. But, asymmetry is still used to avoid participation to any dialogue and become invisible, blending to be part of the natural surroundings, concealing from enemies. An extremist in this is the camouflage art of humans with designers building camouflage restaurant of different kinds.

Aesthetics as part of cognitive sciences did generalize the opinion vs. symmetry dilemma. Neuroesthetics considers the dreaming brain using physiological and psychological methods supported by imaging techniques. The intricacy of symmetry expects evoking wonder and surprise. Dreaming is a development over the imagery layer. The aesthetics of visualization could help in the quantifications of competencies in dreaming targeting effectiveness, efficiency, and the lowering of cognitive cost (of visual or audio events) in getting the dream understanding a step ahead over the "beauty of an image only" primordially concept. The advancement in visualization associate aesthetics in hybrid dreaming considers spatial relationships between nodes and edges, the overall layout, area, flows and aspect ratios of minute details, as humanly unattainable in the awaken states and stresses their priority over focusing only on pixilation details of modern digital computer art reproductions.

Symmetry vs uniquely are not an exclusive attribute of biological life. In minerals some substances do not have any crystalline structure. They are called amorphous. In a set of particles some atomic links makes patters called molecules that are repeating inside the particles field. So we have a first symmetry in the atomic set but the set of obtained symmetric molecules are amorphous unless thy group again based on molecular (some time called ion) links.

The symmetry/asymmetry can eventually be intuitively considered inside the atom. It is available for direct ob-



servation in the upper levels in cosmic spaces with optical devices. Galactic shapes contain symmetric spirals but locally supernovas could break it apart. There are also huge asymmetrical spaces of various densities in the intergalactic space.

Extending the concept: is the dream itself symmetry, or is an asymmetric kind of event? Positioning the dream with The Bishop Grosseteste model should tell.

#### **REFERENCES:**

Anna Ursyn. (2012) Biologically-Inspired Computing for the Arts: Scientific Data through Graphics. IGI Global

John M Corbett, (2007), "Visual Techniques Applied to Ancient Dreams Readings", Paper presented at Dreams and Culture, 2nd International Conference of the Nordic and North European Network for the Study of dreams, Bishop Grosseteste University College, Lincoln, UK

# Application of the Property of Brain tissues' Viscoelasticity to Describe Waking-Sleep Continuity Theory

#### Mostafa M. Dini

#### Toronto, Ontario, Canada

In this paper I will describe how using cognitive science, Psi-theory with the stress-strain property of brain tissues in the cellular and neural networks scale, preserve a continuity in different states of focused-waking, relax-waking and different stages of sleep. The difference between the stressstrain correlations depends on state of brain as at rest (semi isolated) and active (under physical input stress forces and relieving motor outputs consequences of inputs).

### Attitudes toward dreams in the life span

Małgorzata Hołda and Barbara Szmigielska

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In Western society many different concepts of dreams can be found, and individual differences in this area are appreciable. Dreams often play a significant role in individuals' lives: they arouse fear or amusement, they are shared and discussed, and many people use them as guidelines in everyday life, believing that dreams are messages from gods or ancestors. At the same time, many people deny the importance of dreams, considering them only as a series of random arousal in the brain. Furthermore, views on the origin and essence of dreams seem to develop as early as in childhood. Preschool children are able to distinguish dreams from other mental processes and have some knowledge about the nature of dreams. They also have different ideas about the origin of dreams and often share their dreams with other people. Thus, as early as in childhood dreams often play a significant role and children notice them as one of the interesting human experience, which they try to understand and make sense of in their own way. Therefore, it appears that the very important variable in dream research - both adults' and children's dreams - are the attitudinal aspects of dreams such as subjectively perceived functions of dreams, affective response to dreams, private dream theories, and related concepts.

The main goal of the present study was to investigate age-

related differences in attitudes toward dreams. There were two samples in the study. Sample 1 consisted of 672 participants aged 14-77; 332 women and 340 men. Sample 2 consisted of 127 children, 58 aged 4 and 69 aged 6; 63 girls and 64 boys. In order to measure attitudes toward dreams in adults and adolescents (sample 1), a 56-item self-report Attitude toward Dreams Scale (ADS) was used, measuring three aspects of attitude toward dreams: generalized attitude, metaphysical attitude, and psychological attitude. In order to obtain data on attitudes toward dreams in children (sample 2), a structured interview was developed, based on the ADS, allowing evaluation of the same three aspects of attitude toward dreams.

Results of the study indicate that attitudes toward dreams develop already in preschool age. Initially, emotions related to the dream content dominate; then, together with the increase of children's knowledge about the nature and functions of dreams, some behaviors related to dreams also start to occur, such as, e.g., sharing dreams, searching for their meaning or using specific techniques to memorize dream content. Both in children and in older subjects - adolescents, adults and old people - considerable individual differences can be observed. Beliefs about the metaphysical or psychological origin and meaning of dreams, as well as different emotional stance and behaviors related to dreams, can be found in all age groups. Furthermore, it also seems that there is no simple, linear relationship between age and attitude toward dreams: The most involved attitudes can be found in early adulthood, the least involved - in the elderly.

# Dream Safari with the Blue Gazelle: Active Imagination and Creative Art

## Michael P. Jenkins

New York, USA

I will discuss a series of transformative dreams experienced in which animals led the dreamer from one state of awareness to the next. I will present the resonant dream images, briefly described below, and the process of active imagination. I will demonstrate how this method can be utilized to expand our rapport with our dream life and how these internally imaged communications can deepen our understanding of ourselves in conscious awareness. This discussion will include projections of art, which I created in interaction with this dream series. I have included two images as attachments and plan to show 15-20 projected images along with several of the actual art pieces. The presentation will last 30-45 minutes including a question and answer period.

A series of animal dreams that I experienced over a sixteen-month period began with a herd of horses. In the initial dream, my ego-image killed the horses, as I believed soldiers, whom I perceived as enemies, would capture them. I woke distraught and upset that I had killed off the horses, which seemed to be my spirit animals. The next night as I lay down to sleep, I engaged in active imagination, an approach to dream images developed in Jungian analytic theory. I reentered the dream to better understand if and why I had needed to kill off the horses, which seemed like spirit animals. When I reentered the dream, a horse led me to the edge of a forest and another animal appeared. Although I cannot completely place this animal in our physical world,



it is similar in appearance to a gazelle. The gazelle asked if I wanted to follow it and I answered yes. I then jumped off the horse and proceeded to follow the gazelle-like animal into the woods. I awoke from this dream in the middle of the night and experienced the compulsion to 'paint" the gazelle. I got out of bed, returning with a small piece of wood and blue tape. I began to create the dream image into the physical world. This dream interaction introduced a series of dreams in which I would stay with an animal, be led to another animal, and then start a new journey with that animal. In total, I spent time with twelve animals: horses, blue-gazelle, alligator, reptile, tan-lion, tiger, white lion, white-snake, black-lion, another black lion, gazelle-like image, and bluegazelle. Each animal offered a transformative experience where I became the animal, the animal became me, and I moved on to the next animal carrying the previous animal in me. I began to research these animals, write about them and make them into art.

The process of dreaming, using active imagination, and utilizing art as a (semi) conscious means of engaging the dream material, will be discussed and illustrated. I will present the importance of how remaining in contact with ones own creative unconscious can enhance the work of psychoanalysis and engaging with those with whom we work.

## Pascal's Wager & Dreams

### Douglas Jordan

United States Army, Afghanistan - Intelligence Studies at the American Military University

Blaise Pascal developed an argument for why a person should believe in a higher religious power based on a matrix argument. I adopt the style of his argument in order to show why a person should not choose to die while dreaming, as the stakes are too high.

The matrix is set such that there are two variables, dreaming and death. Within each variable, there are two options. For the variable of dream, the options are that the individual is dreaming, or that the individual is not dreaming. For the variable of death, there is the option of dying, and the option of not dying. The entire set of options is set forth in the following four comes.

Outcome I is the combination of dying while dreaming. This results in the actor waking up. This is a good result, especially if the actor is having a nightmare.

Outcome II is the combination of dying while not dreaming. This results in the actor dying. This is not a good result.

Outcome III is the combination of not dying while dreaming. This results in the actor remaining asleep. This is not a good result, especially if the actor is having a nightmare.

Outcome IV is the result of not dying and not dreaming. This results in the actor remaining alive, and maintaining his own personal status quo.

The difficulty arises in that it is not clear when a person is dreaming. Some dreams are so vivid that it is not clear, or the person wakes from the dream, only to still be dreaming.

I close by claiming that a person should not choose to die while dreaming, as the stakes are too high.

# Dream recall and nightmare frequency in relation to alexithymia and personality variables.

### Lucie Kráčmarová and Alena Plháková

Palacký University, Olomouc, Czech Republic

According to the former research, alexithymia is related to lower dream recall frequency and also to thick boundaries. There are conflicting findings on association between nightmare frequency and alexithymia. Most of the studies in this area are case reports or have correlational nature. The present study tries to provide a deeper understanding to relations between dream recall frequency, nightmare frequency, alexithymia and other personality traits. Participants (N=315) were asked to fill in Boundary Personality Questionnaire (BPQ), Modified Tellegen Absorption Scale (MODTAS), Dream recall questionnaire and Toronto Alexithymia Scale (TAS-20) consisting of three scales: Difficulty Describing Feelings, Difficulty Identifying Feelings, and Externally-Oriented Thinking. Regression analyses were computed separately for men and women. According to the results there is no relation between nightmare frequency and alexithymia. On the other hand, associations between alexithymia and dream recall frequency were found. Thinner boundaries in the mind together with high absorption and low scores on alexithymia subscales predict a higher dream recall frequency. This model had a much stronger effect in men. It seems that there is a difference between men and women in the impact of the specific facets of alexithymia on dream recall frequency. Externally-oriented thinking and ability of describing feelings have a greater impact on a dream recall frequency in men than in women. Difficulty identifying feelings have impact on dream recall frequency only in women. These results support findings of the research focused on alexithymia and dream recall in asthmatic patients by Levin et al., where differences were found between men and women.

### Creativity, Art, and Dream

#### Sergio Lombardo

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Art psychology is a complex science born from several disciplines: sociology, aesthetics, art history, experimental psychology, psychoanalysis, mathematics, anthropology and art theories.

All of them are put together in functional and mutual relations. To explain, foresee and create art events we need a theory of aesthetic experience, a theory of artistic creativity and a general theory of the arts. History will be the ultimate evaluator.

In this paper I will outline the eventualist theory of artistic creativity and suggest that both dream and art are biological functions of human evolution: the first concerning a single person, the second concerning a culturally defined population. Both provide adaptation to unforseen changes of the future.



# Dreams and Dream Culture in the Cinema of Andrei Tarkovsky

#### Louise S. Milne

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The work of the great Russian director Andrei Tarkovsky (1932-86) is involved with dreams on many levels. Tarkovsky's style of cinematography itself can be described as oneiric; his open-ended narratives and themes are also dreamlike; each of his seven feature films includes a formal dream sequence. Drawing on Tarkovsky's journals, where he recorded dreams, and his essays on cinema, which introduce the concept of "time-pressure," this paper investigates the underlying cultural concerns and contexts that explain why the oneiric dimension became so central to his aesthetic. Tarkovsky's protagonists are all haunted by war. Tarkovsky was a child during World War II; ultimately his preoccupation with dreams is rooted here, in the experience of real-life apocalypse, imaginatively mediated at one remove, through what Marianne Hirsch calls postmemory. This is the process by which traumatic experience in one generation continues to affect the imaginary in the survivors' children and grandchildren (as in the case of the Holocaust), who feel closely connected to the trauma even though they did not experience it at first hand. The medium of cinema itself - the framework of the moving image in general - becomes the default visual analogy for dreaming in the 20C; so too cinema can be seen to be directly implicated in the transmission of postmemory. Tarkovsky grew up in the shadow of the Cold War. His was the first generation to experience the common nightmare of nuclear Armageddon, whose visual imagery was drawn from the broadcast imagery of Hiroshima and WWII, and so mediated through the movie camera. Tarkovsky directly included some of this documentary war footage in his film about memory, Mirror (1975). Stalker (1979) directly represents a post-Armageddon world. The dream sequence in what was to be his final film. The Sacrifice (1986) stages a nightmare of nuclear war. based on a dream of his own he recorded in 1972. Ultimately, Tarkovsky's interest in the capacity of cinema to express dream-experience, and the nature of the formal dreams he constructed in his films, thus constitutes a commentary on, and contribution to, the traumatised collective dream-culture of post-war period.

## Segmentation of REM sleep into three substages

Gabriele Pieri, Alessandra Virgillito, Massimo Magrini, Luca Bonfiglio, Ovidio Salvetti and Maria Chiara Carboncini

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Introduction. The study of REM sleep has certainly important implications for the study of dreams, because of the connection between changes in significant features of mentation during sleep and periodic occurrence of REM epochs. A basic property of REM sleep is that it is not a uniform stage. A large amount of literature has demonstrated that "tonic" and "phasic" REM sleep should be distinguished, on the basis of differences in electrophysiological signals (EEG, EOG and EMG), in fMRI images, and in mental activity. Furthermore, recent research has shown that, in addition to Rapid Eye Movements (REMs), Slow Eye Movements (SEMs) are remarkably present as well during REM sleep, although their presence is only referred to Stage 1 in the manual of Rechtschaffen and Kales.

In the light of this data, we set out a research project aiming to segment REM sleep into three substages, respectively characterized by: REM enhancement, selective SEM enhancement, eye movement reduction.

Methods. We applied an automatic method that consisted of four processing stages: (a) separation of the EOG signals E1-M2 and E2-M2 into slower and faster components; (b) identification of time intervals presenting enhancement of either slower or faster components; (c) insertion of the information about these intervals into a relational database; (d) final segmentation obtained by means of queries to this database.

Results. The method applied allowed segmenting the epochs of REM sleep into three substages. It also allowed parameters to be obtained able to quantitatively characterize the alternating properties of these substages inside single REM epochs. A comparison was made among the values of these parameters in the course of the night.

Discussion. The segmentation of REM sleep into substages has interesting implications regarding the mechanisms of sleep regulations, the ways of reducing vulnerability during REM sleep, and the complex psychological processes of dream building.

## Dreaming in sleep apnea disorderes patients

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Obstructive Sleep Apnea Syndrome (OSAS), is caused by obstruction of the upper airway during sleep and is characterized by repetitive pauses in breathing during sleep, associated with an increase in inspiratory effort, intermittent oxygen desaturation, sleep fragmentation.

OSAS in known to affect psychological and interpersonal well-being in the waking life by inducing irritability, mood dysregulation, loss of motivation, altered modulation of aggressive drives.

Authors investigated the presence of correlations between such psychic/interpersonal problems and typical themes recurrences in sleep apnea disordered patients' dreams, by using the Typical Dream Questionnaire and other psychological tools addressed to measure waking life issues.

They also tested the hypothesis of a fallout in terms of dream intensity experience, thought to be due to oxygen desaturation and other physiological consequences of OSAS, administering the Dream Intensity Inventory to the clinical sample and exploring the load of its three factors: dream quantity, dream vividness, and altered dream episodes.



## Olfactory Stimulation During Sleep Can Reactivate Odor-Associated Images In Dreams

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Research has indicated that olfactory stimuli presented during sleep might reactivate memories that are associated with this odor. Secondly, it has also been shown that olfactory stimuli are processed during REM sleep and affect the emotional tone of dreams (Schredl et al., 2009). The rational of the present study is to examine whether learned association between odor and images can be reactivated during sleep.

Method. Sixteen healthy, normosmic volunteers underwent a balanced learning task in which pictures of rural scenes and pictures of city scenes were associated with hydrogen sulfide (smell of rotten eggs) or phenyl ethyl alcohol (smell of roses) in a crossover design in the evening. During the following night, the participants were simulated during REM sleep with the same odors and after that awakened to elicit dream reports. The dreams were content analyzed by blind judges along scales measuring the occurrence of the topics presented in the picture series (rural scenes vs. city scenes).

Results and Discussion. The olfactory congruent stimuli significantly increased the probability of dreams about rural scenes, whereas the same effect was not found for city scenes. As these findings support the hypothesis of reactivation during sleep, it would be very interesting to study the effect of dreams as a tool to measure reactivation of task material on sleep-dependent memory consolidation, i.e., whether dreaming about the task increase performance levels in the morning.

# Dreams in United Arab Emirates and Poland – a cross-cultural comparison

#### Dagna Skrzypińska, Malwina Dankiewicz

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Our goal is to compare significance and role of dreams in Islamic and Polish culture (which is strongly based on Christian values). The dream traditions of Islam and of Christianity will be presented, as well as the role of dreaming in both religions.

What is more, a comparison of meaning of several separate elements of dreams in Islamic and Polish dream books will be made (e.g. entering a door means in Islamic culture that a person will finish a project or win an argument, while in Poland it means that a person will be successful in her/his marriage or will undertake a new project).

The significant part of the paper will be dedicated to the comparison of the result of M.O. Salem, M.A. Ragab and S.Y. Abdel Razik (2009) who conducted the first study about significance of dreams in Islamic society (in this case: among United Arab Emirates university students; n=350) and of results received in own study among Polish students (n=200). We made an attempt to replicate Salem and his colleagues' study in Poland. We will present a comparison between Polish and United Arab Emirates' students in areas connected with dreams, such as: the presence of continuity hypothesis, impact of dreams in daily mood and decision making, dreams which became prophecies, presence of religious themes, nightmares and interpretation of dreams.

# Working with dreams in CBT – from Aaron Beck to Jeffrey Young

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Working with dreams is broadly used in psychoanalysis and psychodynamic therapy. Contrary to these approaches, only a few conceptions about dream analysis within the framework of the cognitive-behavioral therapy (CBT) have been elaborated so far. Interpreting dreams is not very common practice in CBT, although it is not ignored, either. The main aim of the presentation is to introduce the history of interest in dreams during the development of CBT as well as methods of working on dreams used in this particular school of psychotherapy. The founder of CBT, Aaron T. Beck studied dreams and this research was one of the most important turning points in his scientific approach - he doubted in psychoanalysis and he turned to cognitive therapy. He stated that dreams reflect patient's conception of the self, the world and the future. As a consequence, dreams are seen as reflecting person's individual cognitive patterns. Apart from Beck, a cognitive theory of dreams was also developed by Calvin S. Hall. He stated that that "images of a dream are the embodiment of thoughts", therefore "a dream is a highly private showing of the dreamer's thoughts". What is more, working with nightmares is very useful in treating Post-Traumatic Stress Disorder (PTSD) with Imagery Rehearsal Therapy. One of the best known and empirically-confirmed methods of working with dreams in psychotherapy using a cognitive component is the Cognitive-Experimental Dream Model developed by Clara E. Hill which also will be presented. Arthur Freeman and his colleagues worked out another approach to dreams within the CBT framework. According to them, a dream is a representation of an idiosyncratic dramatization of dreamer's view of self and the world. This method includes dreams as a standard homework task in CBT. In the schema therapy (a very recent integrative psychotherapeutic approach combining cognitive-behavioural therapy, psychoanalytic object relations, attachment theory and Gestalt therapy), dreams can often portray the patient's early maladaptive schemas and therefore they can be a starting point for imagery work. Even though some dreams seem to be a simple reflection of waking events, others can be helpful in revealing cognitive distortions, schemas and maladaptive thought patterns, thus becoming a useful tool in cognitive restructuring. The principles and techniques for work with dreams in the framework of cognitive-behavioral psychotherapy will be also discussed. It is worthwhile to place working with dreams in CBT framework, as dreaming is one of human's cognitive functions. The presentation aims to summarize contemporary use of dreams in a cognitive approach and psychotherapeutic practice.



## Sleep and Dreaming in Borderline Personality Disorder

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Borderline Personality Disorder is characterised by, among others: emotional instability, impulsiveness and altered interpersonal relations. Complaints related to sleep are also very common in borderline personality disorder. The objectives of the presentation are following: 1) summarise current state of knowledge about sleep disturbances in borderline personality disorder; 2) summarise previous results about dreaming in this condition; 3) introduce a proposition of a research project exploring the relationship between dreaming/sleeping and waking experiences in borderline personality disorder, with additional emphasis on the dreamreality confusion. Review of majority of relevant papers was conducted. Studies on sleep and dream characteristics in borderline personality disorder have demonstrated that this group experiences disturbances of sleep continuity, altered REM sleep regulation and nightmares. Detailed results are not consistent due to the fact that different methods were used. In spite of common occurrence of sleep and dreaming distortions in those subjects, the issue of dream content and the relationship between dreaming experiences and waking functioning has been neglected in research. A research design will be introduced, aimed to explore the process of dreaming in borderline personality disorder with relation to the waking functioning. In the suggested study, main neuropsychological sleep characteristics would be controlled. Furthermore, the authors plan to create a therapeutic training of sleep and dreaming problems for those patients. The presentation aims to summarise contemporary findings in the field of sleep and dreaming studies in borderline personality disorder, while the introduced design is suggested in order to help finding answers to some of the important questions about the dreaming process in this condition.

# On Plato's Dreaming Conception in Freud's Theory

### Marco Solinas

University of Florence, Italy

My paper is dedicated to analyse the relationship between the conceptions of dreaming expounded by Plato in The Republic ant Freud's dream theory. I will analyze this relationship on two main levels.

1) The first level concerns the Platonic conception of the oneiric emergence of repressed desires. This is a conception that prefigures the main path of Freud's subconscious, that is: "the via regia to the unconscious". Furthermore, I'll analyse the psychopathologies related to these theories of dream.

2) The second level concerns the analysis of bibliographic sources used by Freud fist of all in The Interpretation of Dreams, and of his interests. This is an analysis that, in my opinion, allows us to make the hypotheses that Freud not only omitted the acknowledgment of Plato's theoretical genealogy of the via regia to the unconscious, but also the possibility that The Republic constituted a tacit source of inspiration for the composition of The Interpretations of Dreams.

## Gifted Boy is dreaming

#### Giuseppe Tropeano

University of Rome, Italy

Some gifted and talented boys and girls are being misdiagnosed by psychiatrists, psychologists and other health care professionals. These students are at particular psychological risk due to both internal mental organization and situational factors. The most relevant characteristic of gifted children is their intensity in emotional response, power struggle with authority figures, negativism.

Our gifted student, Peter (pseudonym), suffered by a disorder in sleep pattern (delayed phase). Such problem brought him to our Sleep Medicine Center in Rome.

After two consultation with sleep disorder doctor and the consultant psychotherapist, other problems arose: critical and intolerant attitudes towards school and teachers, difficulty in accepting rules and parental authority.

At the age of 9, Peter performed an "informal setting", an interesting "sandplay"; after seven psychotherapy sessions, a good empathic relationship with therapist occurred.

Peter, after the last summer holydays, began to report very vivid dreams, well-recalled. In the paper, a discussion will be carried on concerning the interrelation between awakening change in his life and formal and content characteristics of these intense dreams.

# Dreaming and the self: Towards A New Conceptual Model Of Conscious Experience During Sleep

#### Jennifer M. Windt

University of Mainz, Germany

What exactly does it mean to say that dreams are subjective experiences occurring during sleep? How does conscious experience change as we move from wakefulness to sleep, and what role does self-consciousness play in this process? In this talk, I will argue that the analysis of phenomenal selfhood, or the experience of being or having a self, is the key not only towards a deeper theoretical understanding of dream experience, but also towards conceptually isolating and empirically grounding the necessary conditions for minimal phenomenal selfhood, or the simplest form of self-experience. Using examples from scientific dream research, I propose an empirically informed conceptual model of dreaming according to which different types of dreaming, but also sleep-wake transitions are best described as involving changes in self-related processing. Specifically, I argue that the decisive factor enabling the transition from wakefulness via sleep-onset imagery to fullfledged dreaming is a shift in spatiotemporal self-location. I then suggest that this model provides the resources for theoretically describing and empirically investigating dreaming independently of sleep-stages; in particular, because spatiotemporal self-location helps ground more complex forms of self-experience in dreams, this model can be fruitfully



applied to different types of dreaming (such as nightmares and lucid dreams). It is also attractive because it provides a conceptual bridge from dream research to interdisciplinary consciousness research, thus laying the groundwork for an integrated research program on conscious experience across the sleep-wake cycle. In particular, I suggest how scientific dream research can be meaningfully connected to recent work on virtual reality, full-body illusions, and mind wandering and formulate several open questions for interdisciplinary consciousness and dream research.