

Abstracts of the 36th Annual Conference of the International Association for the Study of Dreams

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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 categorized into thematic groups and within the category sorted according to the last name of the first presenter. Affiliations are included only for the first author. A name register at the end is also provided.

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1. Keynotes

The Hidden Worlds of Children's Spiritual Dreams

Kate Adams

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The spiritual worlds of childhood are enchanting and enticing, yet they often pass by unnoticed. When adults are aware of them, they often frame them as make-believe or figments of the imagination. Yet in these spaces, children contemplate profound questions as they seek, and find, meaning and purpose in life.

Dreams are central to many children's spiritual lives, serving as a place for both religious and spiritual experience and a space for those philosophical contemplations.

Across the literature on children's spirituality, dreams are often mentioned by children, even when the researcher has not intentionally sought them out. And yet, children's spiritual dreams remain much less researched than those of adults across a range of disciplines. In wider, everyday life, their spiritual dreams are also often invisible for a number of reasons.

This lecture invites you to accompany children on their journeys through their religious and spiritual dreams, from divine dreams which they report as encounters with divine beings, through to other big dreams which impact them, often for a lifetime. Hearing the children's voices is essential; not only the descriptions of their dreams but also their reflections upon them. It is in this space of reflection and dialogue that we see how children make meaning of them, and come to hold these dreams as special. Given that these often make a lasting impression on their lives into adulthood, it is important to recognise and value them, to help children grow into spirituality confident adults.

Parasomnia: a window into dreaming process?

Isabelle Arnulf

Paris, France

The parasomnias include sleep talking (REM and NREM sleep), sleepwalking, night terrors (NREM sleep) and REM sleep behavior disorder (RBD), sleep-related hallucinations and sleep paralysis (REM sleep). Many can cause injuries and sleep disturbances, thereby needing to be diagnosed and treated. Of note, sleep talking, sleepwalking and RBD correspond to dream-enacted behaviors, thanks to isomorphism between behaviors and later dream recall. The gestures, speeches and facial expressions of the dreamers render the dreaming scenario visible for external observers. We first performed an ethological repertory of all visible behaviors, speeches and, more recently, emotional face expressions, in RBD and sleepwalking in a large (>200 subjects) adult cohort. Aggression by animals and humans predominated in RBD (the dreamer counterattacking the aggressor) whereas natural catastrophes predominated in sleepwalking/night terror (the dreamer trying to escape the imminent danger by running away), suggesting a "flight (NREM) and fight (REM)" answer to threat simulation. Similarly, the sleep-associated speeches (whether in genuine sleep talkers or in patients with RBD and sleepwalking) were mostly negative, worried, and repeated. Verbal violence (more frequent in male sleep talkers) contained more profanities in NREM sleep and insults in REM sleep. However, non-violent, elaborate behaviors and speeches were also visible, although

less frequent than violent ones. Smiling asleep was rare in normal adults, but quite frequent in RBD patients. This narrow but fascinating window helped test some hypotheses about dreaming, including which motor and verbal systems are at play during dreaming, whether episodic memories are included into the nocturnal behaviors, whether the eyes scan the dream scenario during REM sleep, whether non-dreamers do not dream or do not recall their dreams, without the bias of dream recall.

The Road to Reality: How the New Science of Dreams Explains Our Mind

Stefan Klein

Berlin, Germany

From the earliest oracles to Freud, humans were interested in dreams to answer three main questions: Why do I dream? What do my dreams say about me? How can dreams help me in life? To account for their strangeness, dreams were seen as an expression of unconscious desires which seemed to defy any objective interpretation. Only recently, new methods in brain research made both the act of dreaming and the content of dreams matters of empirical investigation. Dream scanners, reading dream scenes in real time out of a sleeping subject's brain, are even a reality now. New experiments have linked dreaming to learning and brain plasticity. This talk will summarize these insights and show how they put dreams into a surprising perspective: Rather than merely being puzzles posed by the unconscious, dreams turn out to be the key to solving the mystery of our consciousness. They allow us to recognize how our brains produce what we experience as reality.

Deathbed Visions, Near-Death Experiences and Visitation Dreams

Penny Sartori

Swansea, UK

Dr Penny Sartori undertook the UK's first long-term prospective study of Near-Death Experiences (NDEs) at the intensive care unit where she worked as a nurse. During her twenty-one-year nursing career she witnessed many dying patients communicating with unseen people whom the patient claimed were their deceased relatives. Her eight-year doctoral study elicited cases of NDEs, out of body experiences (OBEs) and deathbed visions. The findings of the research could not be explained by materialist explanations such as being due to drugs administered, lack of oxygen to the brain or abnormal biochemistry. Such anomalous experiences are often dismissed as hallucinatory. The research compared cases of NDEs with cases of hallucinations and demonstrated that both experiences were very different.

During deathbed visions and NDEs, and additionally in visitation dreams documented in the lucid dream literature, people often gain information that they were previously unaware of, and some acquire skills they did not previously possess. The findings of such research are a challenge to the materialist perspective that the brain produces consciousness. This paper will consider some cases of visitation

dreams and cases of NDEs, and will discuss the implications that these findings have on the current understanding of consciousness.

The EEG Correlates of Dreaming

Francesca Siclari

Lausanne, Switzerland

Dreaming is a form of consciousness that occurs during sleep, while we are functionally disconnected from the environment. Traditionally, dreaming has been linked to REM sleep, a behavioral state characterized by fast, desynchronized electroencephalographic activity similar to wakefulness. In recent years, however, it has become clear that dreaming can also occur in NREM sleep, in which EEG activity is dominated by slow waves and spindles. This has challenged the understanding of the neural correlates of conscious experiences in sleep. In the present talk I will present a series of studies in which we investigated the neural correlates of dreaming using a serial awakening paradigm and high-density EEG recordings. More specifically, I will show how local EEG features, including spectral power in different frequency bands, slow waves and spindles relate to the presence and absence of dreaming, and to specific dream contents. The results I will present suggest that local EEG correlates may account for the presence of conscious experiences in behavioral states with radically different global EEG signatures.

2. Morning Dream Groups

Dreams as Storytellers

Erin Amundson

Ermelo, Gelderland, Netherlands

This morning group engages our inner creative storyteller from our subconscious experiences. As a collective, we engage the stories of our dreams to inform both our waking life as it is and our creative power to change. Storytelling is an indigenous practice that is often lost in contemporary mystic engagement. By inviting our inner storytellers out into our waking world, we bypass resistance and welcome the co-creative process. This group content is a powerful dream work technique that takes participants out of their heads and into their subconscious. This technique has been used as a morning group meeting in dream retreats facilitated by the presenter for the past 2 years. This type of practice creates a community immediately, as participants invite one another into their stories and the collective experience of the archetypal elements is invoked. This is a practice in which an entire group can heal, be inspired, or transform based on the dream of one person, and one person can be significantly inspired by the group in turn. In each morning group we will begin with the dream of a participant, told by the dreamer in first person. The dreamer will then share his/her experience and understanding of the dream by sharing

emotions, meaning and the dreamer's felt "theme" story of the dream. Following this, we will open the group to other individual perceptions of the dream "theme" and archetypal stories. The dreamer will be reminded to decide for her/himself the ultimate experience of the dream and story. When we have the collective dream theme stories, the group will then be guided in a meditation specific to drawing out each person's inner dream storyteller.

Dreamers will be prompted with questions to explore how this dream story applies in their own subconscious and waking world. We will then share insights as a group, and dreamers will be invited to integrate the material through the day with more reflection, ritual or sharing. The original dreamer will be revisited at the end of group to inquire if their insight remains the same or has been inspired in some way. Typically, there is time for 1 or 2 dreams to be shared this way within the hour.

Each day of the group, we'll engage at least one dream story. The process is meant to open up new possibility, however, the facilitator will always make clear that every individual's experience of a given dream is that individual's experience and that we are not here to "be right" about someone else's dream for them.

Dreams and the Energy Body Morning Dream Group

Bhaskar Banerji

Berkeley, California, USA

This morning dream is essentially a land-based version of the Dream Watsu morning group convened at the 2017 IASD conference in Scottsdale, AZ. Participants will first be introduced to the Movie Dream Process, a non-interpretive way of unpacking dreams developed by this educator, based on clarifying questions and treating dreams as if they were movies - a series of moving pictures grouped into scenes. The ethical guidelines of the IASD will also be reviewed with emphasis that the dreamer is the ultimate authority of their dream. A brief explanation of Reiki will be presented as well as why dreamwork and Reiki integrate well together. Participants' dreams will be explored in teams of three where one person will be the Dreamer and the other two play a supportive role as Helpers, asking clarifying questions and providing physical/energetic support using various body holds. This work is based on the evolution of my private practice working with clients integrating Dreamwork with Energy Work (Shiatsu, Polarity Therapy, & Reiki). E-motions or "energy in motion" form the backbone of many a dream, and Reiki is a form of energetic bodywork. Thus, when a dream is being unpacked, Reiki turns out to be an expedient way to connect more deeply with the feelings present in a dream and bring them to the surface of awareness. On the first morning participants will first be provided with an overview of the entire workshop process; then a detailed explanation and demo will be provided of the Movie Dream Process, the means for unpacking dreams, in which participants will also participate. Participants will also be introduced to the 4 basic hand holds (Opening Hold, Supportive Hold, Grounding Hold & Closing Hold) and their significance will be explained. On successive mornings, participants will break up into triads and practice the aforementioned methods.

Experiential Dreamwork: Dreams as Emotional Immune System

Katherine R. Bell

Santa Cruz, CA, USA

Dreams are treated as experiences rather than puzzles. I encourage dreamers to slow down to explore feelings and associations. Participants may speak a dream each morning, but we highlight one dreamer each day, perhaps embodying the dream to deepen the feelings. In Experiential Dreamwork, the focus is on the feelings in the dreams and what they reveal about the dreamer's waking life situation. Since dreams arise from the deepest part of our limbic brain which is associated with feelings and visceral sensations, dream feelings can cast light on how we are processing (or not processing) emotions in waking life. We treat dreams as part of our emotional immune system that has naturally evolved to work out waking life issues. We believe that dreams fulfill this function even in the vast majority of dreams which are not remembered, but that by bringing the feelings and images of the dreams that we do remember into consciousness and into our bodies, we can enhance their transformative power and thereby improve our waking life experience.

At the beginning of each group I will lead a process called Dream Weaving in which each participant has the opportunity to speak a dream moment during a moment of shared groundedness. There is no feedback or interaction at this point; the dreamer has the chance to feel what comes up for them when they share their dream in a supportive container, thus letting the dreams work on us similar to the way they naturally do every night but adding in the enhancing elements of personal consciousness and shared experience. In most of our time together, we will focus on the dreams of one participant each morning. As we explore each dream, we will slow down and pay particular attention to the feelings, associations and memories that arise as the dreamer brings the images into focus. Treating the dream as an integral aspect of the dreamer's emotional immune system, we respect the naturally evolved transformation that the dreams bring, knowing that we don't need to understand them to enhance their efficacy. This is similar to breathing, which is integral to our bodily well-being, but we don't have to understand the intricacies of oxygen exchange to know that breathing deeply enhances its beneficial effects.

Proceeding only at the pace of the dreamer, and ready to drop any suggestion that the dreamer rejects, I will invite each dreamer to slow down and breathe into any dream moment where the feeling is strong or where the image is powerful. This simple yet profound technique respects the natural power of our dreams and forms the basis for Experiential Dreamwork. This focused but undirected attention typically results in insights and emotional shifts that are helpful to the dreamer in waking life. Because insights are rooted firmly in images presented by the dream, the dreamer need not share out loud (or even be consciously aware of) waking life associations and indeed may treat the whole group experience as an interesting exercise. Yet the dreamer still gains the benefit of touching into the full range of experiences that are being offered by the dream. Thus confidentiality is maintained and the dreamer remains the ultimate authority on the personal meaning of their own dream. If the dreamer agrees (and if time allows) we may act out the dream moment to allow the feelings to be more viscerally embodied by the dreamer.

Multi-dimensional Dreaming

Virginia Bennett and David Cielak

Oakland, CA, USA

This Dream Group is focused on the Multi-dimensional self concepts and practices from the Seth Material (see below). The Multi-dimensional self is Seth-based terminology referring to the view that we each exist in many dimensions simultaneously, not only in time, but through aspects of the greater Self, each conscious within their own dimension. Dreams provide a major forum intersecting these different dimensions and aspects. Dreams are “lived experiences” while we sleep during which we can “try out” and choose probable events that may be translated into our current lives. While waking or sleeping, “the point of power is in the present” and “we create our own reality” through beliefs, thoughts, and emotions which are amplified in the dream state. Dreams serve many functions and purposes and, in part, provide us with ways to find greater value fulfillment in our physical lives. This Dream Group will focus on our Multi-dimensional selves in relation to exploring dream realities, understanding simultaneous time and simultaneous selves, gaining insight and creativity, and creating reality using the dream state. The Dream Group will be shown Seth’s ways of incubating dreams, becoming “awake in dreams,” and using suggestion to facilitate gaining access to the Multi-dimensional selves.

We will use the following techniques, the exact order of which will depend on the size and composition of the group: telling dreams, group discussion, guided imagery exercises to enhance dream incubation and recall, dyad discussion, writing and drawing dream depiction, and a suggested adjusted sleep schedule exercise. We will also experiment with methods to encourage lucid dreaming. Presenters will share their experiences and examples in the use of these dream practices. In line with the Seth Material (and IASD), interpretation of all dreams is decided by the dreamer and no one else. It is not necessary for dream group participants to be familiar with the Seth Material. The dream group will be experiential and not didactic. The purpose of this morning dream group is to (1) acquaint attendees with the concepts/experience of our Multi-dimensional selves and use specific exercises and incubations derived from the Seth Material, that will be useful and practical; (2) expand attendees’ view of how the Multi-dimensional selves via dreams helps us to create our personal reality; (3) provide an experience and platform for attendees who are familiar with the Seth Material to explore and share their own experiences as related to their Multi-dimensional selves and dreams. The group is suitable for beginning, intermediate, and advanced level attendees.

The Seth Material consists of 30 books (3.9 million words) plus additional transcripts of class sessions that describe the nature of physical and metaphysical reality. Translated into many languages, over eight million copies have sold worldwide. It arose from the combined efforts of Jane Roberts, a writer and poet, her husband, Robert Butts, an artist, and Seth, who described himself as an entity no longer focused in physical reality. Jane Roberts utilized a full trance state during which Seth could speak through her. The Seth material has been widely considered as a cornerstone for transpersonal development and understanding, and also for gaining skills to manifest desired outcomes. Seth’s ap-

proach to dreams contains many ways to encourage their integration into our daily lives.

Ullman Dream Appreciation

Mark Blagrove

Swansea, UK

In the session I will: 1. Describe the stages of the group dream appreciation method of Montague Ullman, following his (2006) book *Appreciating Dreams: A Group Approach*. 2. Conduct an Ullman Dream Appreciation session adhering closely to the stages of the technique as described by Ullman, and following his requirements for safety and curiosity in the group. The IASD ethics statement will be followed at all times.

Reference

Ullman M. (2006) *Appreciating Dreams: A Group Approach*. Cosimo Books.

Exploring the Heart of the Dream

Robert P Gongloff

Malaga, Spain

Themes reflect the major issues going on in one’s life. A theme is the important message, idea, or perception that a dream is attempting to bring to your conscious mind. In the dream group, the leader will present a quick overview of dream group ethics, then will explain what themes are and how to determine them. Generally, the method involves addressing some key questions about the dream, such as: What is the basic activity going on in the dream? What are the main characters doing in the dream? What is the major issue concerning the characters? What is the apparent or presumed motivation of the characters that causes them to act this way? Theme statements are best determined when they are personalized, stated in the present tense, and don’t just restate the words or actions from the dream. Each group member wishing to explore a dream will present the dream to the group, without interruption. Group members will be given time to ask the dreamer for clarification on points in the dream. They will then offer suggestions on possible themes based on their versions of the dream, incorporating the techniques described above. The dreamer will then be invited to share group insights. In many cases, determining the theme alone has been found to be sufficient for providing a good “aha” for the dreamer. Due to time constraints, the intention is not to go any farther into the dream than the theme itself. Participants in dream study groups using these theme-oriented techniques have realized several benefits: (1) The dreamer gets to the core issues presented by the dream quickly; (2) The dream group tends to relate more to the dream rather than to the dreamer, thus providing more safety for the dreamer; and (3) The theme provides a context or framework within which the dream symbols can be explored.

Developing the Intuition in Group Dreamwork

Curtiss Hoffman

Ashland, MA, USA

Jung once wrote that he found it useful to approach each dream of his analysands with absolutely no preconceived idea of what the dream might mean. This discipline helps to eliminate the interference of the conscious mind in the dreamworking process and allows for the entry of intuitive wisdom. Anyone who has done dreamwork for long enough is likely to have had many of what Jeremy Taylor called “ahas” – intuitive insights which help not only the dreamer, not only the person commenting on their dream, but the entire group which is working the dream. By using the Ullman method of group dreamwork as modified by Taylor, which involves assuming that the dreamer knows better than anyone else what his/her dream means, and then attempting to elicit the multiple meanings by a question-and-answer methodology without imposing the dreamworker's views in an authoritative way, these intuitive sparks can be nurtured and the capacity to recognize them can be enhanced. This is especially likely to occur in a group setting, as the group works together over an extended period (in this case, 4 days) to generate bonds and interaction patterns that resonate with one another and their dreams also weave together in mutual patterns. As a way of augmenting this yet further, dreams will be explored beyond the personal dimension with reference to the archetypal ideas emerging from the collective unconscious, using the method Jung referred to as “amplification”, which draws historical and mythological and literary

material into the orbit of the dreamwork, again in a non-authoritative manner, using the “If It Were My Dream” approach developed by Ullman and Taylor.

Morning Dream Group

Helen Landerman

Tucson, AZ, USA

Attendees will tell or read a dream and/or listen to another's dream and then discuss it. Methods used will be group projective, dream interview, Gestalt and dream theater. Also, art materials will be available to draw or paint the dream. Basis for methods used: Jeremy Taylor's Dream Work, Gayle Delaney's All About Dreams, Robert Hoss' Dream Language.

Spirituality and Lucidity Dream Group

David Low

Flourtown, PA, USA

Methodologies: Taylor-Ullman with elements of Sparrow 5-Star and standard guided imagery at beginning and end. The dreamer whose dream is being worked is the authority. To open the group in the first session, there will be an introductory discussion (five minutes max). In subsequent sessions, there may be questions from previous sessions. Methodologies employed will emphasize the all-embracing nature of the group, caveats concerning appropriate atti-

tudes towards others' beliefs, the encouraged use of religious or spiritual vocabularies from individual traditions; and learning goals will be mentioned.

1. The facilitator will lead a brief guided imagery centering to start the group;
2. Facilitator gets dream titles and lucidity levels (None, a little, significant, complete) from group members;
3. Group determines which dream to work;
4. Group assumes “open” sitting posture, to listen with their bodies and receive/experience the dream with respect;
5. Dreamer relates dream in present, slowly;
6. Participants all give a single feeling word they experienced from the dream;
7. The dreamer gives new understandings of dream from the retelling and hearing feeling words (if any);
8. Group comes to an agreement (informed strongly by the dreamer) on the most significant “keystone event” in dream: something that happened, that the dreamer did, that was said, or a circumstance;
9. Participants all mention what they might have done differently in the dream, if it were their dream, at least with regard to the keystone event. The facilitator (or others before him) will be sure to propose an OPPOSITE circumstance, course of action or statement to what occurred in the dream;
10. The dreamer then mentions his or her own preference concerning alternatives and shares any new insights and feelings about the dream;
11. Participants share other aspects, if any, of possible meaning that the dream would have for them if they had the dream;
12. Dreamer shares new/enhanced understanding of the dream, and how it might be honored;
13. CLOSING GROUP-- Towards end of session: Q & A, experiences of induction techniques--Facilitator closes group with guided imagery for individual and group dream intentions.

Radical Ritual – Exploring the Asklepiion Dream Incubation Process – Ancient Myth as Healer

Laura Payne

Chichester, West Sussex, UK

The history of the ancient cult of Asklepios, the Greek God of healing, and his earlier Egyptian counterpart Imhotep will be discussed. Then the key concepts of the Asklepiion dream techniques will be explored in the first morning session. Ancients believed that dreaming was an activity of the soul and essential to healing of the mind, body and spirit. Asklepiion cure centres were a fundamental part of the ancient Mediterranean world, with 320 documented sites around this region. Once part of the Great Mysteries, Asklepios is considered a Pre-Christ figure, born of a divine father and mortal mother. His Egyptian counterpart, Imhotep, is accorded a similar heritage. As high priest and chancellor to the pharaohs and architect of the first step pyramid at Saqqara, Imhotep was also revered as a god of medicine. Saqqara's adjacent temple of healing is similar to Asklepios' main centre at Epidaurus in Greece. Modern scholars are now studying links between Imhotep and Joseph of the Old Testament Bible.

In preparation for dream healing, incubation rituals would include massage and other body therapies such as hydrotherapy as a cleansing and purification process. Then an individual chosen by the group would enter the Abaton – a womb-like sleeping cave – whilst the remaining group would sleep in a nearby sleeping chamber. Dreams would

then be shared and discussed by the dream group, before the supplicants would submit to a continual creative imagination flow of music, poetry, art and drama during the day, to get ready for further healing in the next night dream cycle. As supplicants did in ancient times, we will develop a radical ritual to create the ideal environment in preparation for dream incubation and healing, following the tradition of studying the Asklepiion healing images of the boy, old man, dog, snake and dwarf attendants in various artistic forms. IASD supplicants looking to attend this morning dream group will be asked to select a preferred Greek myth before the conference that speaks to their process. They will give a brief presentation of their chosen myth, with any accompanying imagery, music or poetry that expresses the myth's theme, in the way that the ancients enjoyed dramatic and musical performances as part of the dream preparation ritual. (Other daily conference artistic events during the week will also continue to contribute to this imbibing of the creative process). Ideally it would be interesting to recreate the group sleep chamber and abaton sleep process at the Rolduc Centre.

If not possible using the rooms available, then the dream group supplicants will return to their rooms in the evenings, re-engage with their chosen myth material, shower with a sense of ritualistic cleansing and purification, and then sleep. Anyone with specific healing needs could be elected by the group to study and assess the effects of any potential group collective dream healing. The group will then meet each morning to share dreams and explore the emergence of any Asklepiian imagery and how that relates to the supplicants' process. Any collective imagery of the group will also be studied. Dreams will be discussed by the group. There will be no ultimate authority on any interpretation, as this is about the personal accumulative effect of ritualistic dreaming.

Listening to the dreamer (Language: German)

Michael Schredl

Mannheim, Germany

This approach is based on the client-centered therapy developed by Carl Rogers. Interpretations in any form are discouraged because the interpretations reveal more about the interpreter than about the dreamer. Even the dreamer herself/himself is not encouraged to use interpretative methods. The group will learn to ask open-ended questions to stimulate the dreamer to think about the links between the dream (emotions, cognitive patterns, and the way the dream ego acts) and current waking life issues. After working with the dream, group members can share their own thoughts and feelings connected to the dream's topics.

First-timers' Morning Dream Group: Tracking Your Dreams

Bernard Welt

Takoma Park, MD, USA

Prof. Welt has directed dream-sharing groups for over 30 years, with a particular emphasis upon introducing interdis-

ciplinary perspectives from the sciences, the humanities, and the arts. As an educator of artists and designers, he focuses on the power of dreams to overcome outworn habits of thought and break conceptual deadlocks, and the capacity of dreamwork to enhance intuition, creative response, and sensitivity to others. He has conducted workshops on the dream journal in both academic and community settings, and generated many useful educational materials, guiding participants to learn from depth psychology, neurobiology, contemporary theories of function and meaning, artists and writers, and cultural traditions. Prof. Welt collaborated with Kelly Bulkeley on the first-timers' group at IASD 2018, and hopes to continue the tradition of the workshops facilitated by Kelly and Jane White-Lewis which welcomed IASD newcomers by providing support and broadening perspectives, and often secured their continuing loyalty and interest in IASD.

This morning dream group will be the very first event of the very first IASD conference for some attendees. The initial meeting will solicit participants' current awareness of and interest in dreams and dream-sharing, encourage sharing of ideas and experiences, and introduce the mission and guiding principles of IASD. Basic methods for recalling and recording dreams will be offered and explained. The following sessions will first of all allow members to raise any issues they encounter regarding dream recall and recording, with the goal of establishing a consistent dream-journal process over our 5 sessions. Second, they will proceed from careful training in a non-intrusive process of sharing dreams with others, to encouraging participants to experiment with different ways of working with their own recorded dreams—drawing especially on Freud, Jung, Gestalt, and the advice of creative artists in different media. Third, they will provide a place to check in with other first-timers, comparing experiences and resources as they encounter them day by day.

3. Workshops

How Sleep State and Dreaming Impact Perceptions of Empathy and Societal Justice in the Real World

Jeanne M. Anastasi and Marc Hanlan

Media, PA, USA

There is limited research on the societal and justice perspectives of those who are generally more aware of their dreams and sleep-state than the general population. Attendees will be asked to share their perspectives on empathy, societal justice, and fairness in the world around them. Their stories and insights may offer a unique perspective on local and global challenges and opportunities.

Background: Dream science is often focused on the act and impact of dreams on the individual. Numerous researchers have explored the 'real-world' applications of dreams to waking-state (Paulson, Barrett, et al., 2017; Bergstein, 2013; White & Taytroe, 2003) but these have generally been focused on individual impacts and shifts in personal perspective. There appears to be limited research on the large-scale societal perspectives as a result of sleep-state and dream-

ing. For those who may have greater-than-average awareness of their dreams and sleep-state, there is an opportunity to explore their perceptions of how the use of creativity, empathy, and societal justice impacts current perceptions of fairness, bias, justice, and hope in the world. The IASD conference attendees offer a population familiar with dreams and sleep-state. This, in turn, offers a unique opportunity to collect and examine their perspectives of and impact on societal bias and culture.

The Session/Workshop: How do those who report awareness of dreams and sleep-state describe societal bias and distributive justice? Do they feel that freedom or equality is more important in global and local society? We propose a workshop based around a highly-interactive dialog using a Critical Ethnographic approach (Madison, 2005) that allows exploration into diverse perspectives of indigenous and modern society, including art, poetry, mythology, literature, performance, and culture (Denzin & Giardina, 2014). Intended as a multi-disciplinary view of these perspectives, the authors will guide an interactive group dialog with the attendees, building upon their differing perspectives, expertise, experience, and insights. No interpretation per se of reported dreams will be made by the authors; each attendee will interpret her/his experiences as a result of the interaction with the authors and other attendees. The protocol will consist of the research questions and any follow-on dialog as well as symbolic media to aid elaboration (e.g., mirrors to draw dreams) (Schensul & LeCompte, 2013). The actual dialog will depend upon the attendees' personal experience, expertise, and perspectives, while the authors will include their perspectives and some recent group research to catalyze the dialog. To reflect the attendees' perspectives, no pre-determined limits of dialog are imposed (other than ground rules). Expected topics may include: recent neuroscience research on waking and non-waking sleep states; the nature of expression through art, creativity, and community; societal norms that are positively or negatively reinforced by dreams, cultural artifacts, and beliefs; Kachina spirit messengers; time suspending activities and timelessness as a trigger for transcendence; intentionality in dreams and culture; and more. Ground rules:

- Respect each other's time, experience, expertise, personal space, emotional, energetic diversity, dignity, and "fresh eyes"
- Listen to your own dreams, your own heart, and your own soul.

Reincarnation Dreams and Evolution of Soul

Kiran Anumalasetty

Hyderabad, Telangana, India

I had a powerful dream when I was 14-year-old boy in which I saw vividly seven past lives in a row. The dream shattered the conventional belief that I am this limited body. I saw myself in several bodies and in between, I saw that there is a choice on what kind of life I want to select. There are lessons learnt from each life time and plans made for next life time. When I asked myself, what continued from one life time to another in this dream, the answer is clear. It is the wisdom from the lessons and the beauty and joy of the experiences. My research into reincarnation dreams is triggered and facilitated by the richness and vivacity of the

dreams of my clients. I discovered that these dreams open doors for tremendous healing and new possibilities. Reincarnation dreams largely have a single motto - to act as a catalyst in the evolution of the soul. For the Soul, all present life challenges are lessons to be learnt. A lesson learnt turns into wisdom.

The workshop intends to present a method to work on reincarnation dreams to uncover the meanings of the dream and apply them in day to day life. The method is evolved working with several clients on their past life dreams. The objective of the method is a) to make a connection between the dream and the unresolved karmic complexes carried from past life into present life. b) neutralize the karmic complexes c) Evolve or transform one's life experience. The method consists of three stages: 1. Listening to the dream; 2. Interaction with the dream; 3. Integration.

In the listening stage, a client is facilitated to slow down the brain waves, to enter deeper states of trance and to access the dream memory. Just be with the dream and let it express itself fully. In the interaction stage, one participates and engages with the karmic material dream is exposing. There is room for reliving the experience, facing the deeper emotions and allowing catharsis naturally. Dream is a voice of the soul. The embedded message from the dream can be a realization, an understanding or a Soul experience. In the integration stage, one will be able to relate the feedback from the dream to the present life and to allow a shift within. We exist beyond our body and mind. A reincarnation dream reminds us about our infinite nature and inspires us to search the deeper meaning of life. It is important to acknowledge such dreams and give them the right place and attention in our lives. The workshop is primarily experiential. The participants will be guided to: a) revisit a reincarnation dream memory (as if it is happening now); b) deeply listen to a dream and let the story and the emotions unfold; c) make a connection between past life lessons and the present life; e) Experience one's own eternal nature and see the present life from the Soul's perspective.

Dream-themed Music: Interpretation Workshop and Experiment

Stephen R. Barrell

Durham, NC, USA

Attendees will listen to short dream-related music pieces by the presenter and connect with their visualizations of each as if it were their dream, then share their experiences. The question arises: what do listeners experience and visualize when they hear a dream-related musical piece without knowing the title of the piece, i.e. "My experience of this piece as if it were MY dream is...." Will they share similar experiences with each other, or with the composer (through the title), or will their experiences be very individual and different?

Some listeners may wish to use the time simply as meditative and reflective, just to enjoy the experience. In the workshop interaction that follows, however, listeners will share their experience of each piece, describing what imagery or feelings were evoked, just as if they were interpreting another person's dream, and we will look for shared experiences, to see how closely (or not) their experiences were to

each other. Once each piece has been discussed, and we have a sense of how closely we shared the experience with one another, I will reveal the actual title so we can see if our experiences aligned with the composer's intended experience (the title) of the piece. I believe we will discover that some detailed experiences, not readily apparent from within the pieces themselves, will occur, suggesting telepathy between listeners. The workshop is something of an experiment, very similar to "if this were my dream" sharing, except that it opens participants' range of dream experiences to include music as a vehicle for the "if this were my dream" experience in ways they have probably never considered.

How Kinesiology Can Be a Great Help in Recognizing and Interpreting Your Dreams

Mies Bartholomeus

Sint Nicolaasga , Netherlands

Mies Bartholomeus works with dreams with the help of the kinesiology, the muscle test method. Experience of working with dreams in my kinesiologic practice. Introduction: 1. the explanation of the phenomenon muscle test; 2. show / experience how the muscle test works; 3. how to clear the dreams with the help of images to be tested; 4. active example session with a person available or maybe a session from my practice on a screen.

Mandala Drawing Technique as a Method of Understanding Dream Symbols

Ann Bengtsson

Drammen, Norway

Mandala drawing technique is a creative method of opening an energy-laden powerful dream-symbol to get a deeper understanding of the symbol. We will begin the workshop by having a brief introduction to Mandalas. For thousands of years the Mandala has been used all over the world to focus awareness. Jung used the Mandala drawing technique to come closer to the Self revealing itself. This workshop gives you a method of uncovering the meaning of your most energy-laden dream symbols in a creative way. First you reproduce the original dream-symbol within a circle. The circle can be understood as a window towards the Self. You color the result and then you reproduce the essential symbols of the first drawing in a new circle and change the picture as you feel free to associate. You keep working like this, and through the transformation-process the deeper meaning of the symbol shows itself after a shorter or longer series of drawings. When you reach the end product you will know. The transformation-process makes it possible to understand obstacles or qualities, and in this way awareness can open. At the end of the workshop, small groups share the transformation-processes and finally a few examples will be shown in plenum.

Das Grenzgebiet: The Borderland

Virginia G. Bennett

Oakland, CA, USA

In German, "das Grenzgebiet" translates as the "border area" or "borderland". This workshop will foster exploring the border between the subconscious and the conscious mind. Current brain research indicates that part of the brain is continually dreaming. When we awaken we focus our attention on external stimuli but, just as the stars do not actually disappear in daylight, our dreams continue in the background. When we soften outward focus and pay attention inwardly, we can tap into a flow of dreamy images, sensations, thoughts, and feelings. Freud developed the use of free association to mine this flow of inner experience. This is essentially the process used in this workshop to help participants explore the "borderland" of their dreaming mind that operates during a waking state. The only difficult aspect to this procedure is how simple it is. It requires no effort, but also no editing or censoring of what arises.

The process has participants work with a partner, preferably someone not previously known. One person will be the designated "dreamer" and the other the "sitter". The sitters will place themselves just behind the dreamers. The workshop leader will guide participants through a gentle relaxation process designed to help dreamers move into a state of reverie, tuning out external stimuli. Sitters will be encouraged to allow their minds to move into an "attentive" reverie. Sitters will have pads of paper with a line drawn down the middle. Dreamers will say aloud whatever comes into their awareness: thoughts, feelings, memories, bodily sensations, images, words, etc. The sitter will take notes (not verbatim) writing on one side of the paper. Sitters are to remain aware of their own thoughts, images, feelings and make note of these in the second column. It is important that both dreamers and sitters refrain from any conversation during the process (not even "uh huh" or "yes", etc., responses are to be given). After fifteen minutes, the process will be brought to a close, and the sitters can now share their notes, including their responses to the dreamers. It is emphasized that this is not to analyze or "figure out" the meaning of the material but instead to look for correlations between the dreamers' and the sitters' inner experiences. Any "meaning" is determined by the dreamer. There will be another round of this process, with the caveat that people are to find someone new with whom to partner. This process engenders a form of "deep listening" both to another person and to one's own inner experience, having no agenda, but remaining present to whatever arises. It helps people to learn to "change the channel" from the busy-ness of the intellect and to gain awareness of the dreamlike process occurring in the background. Even seemingly random thoughts can have significance. It also provides an opportunity to see how readily we can resonate to another person's experience and have corresponding associations without trying to do so. In this way, it encourages greater exploration of dreams, hypnogogic imagery and even a form of "telepathy" that is part of our daily lives yet can be eclipsed by our external preoccupation. In short, it is a way to discover more about the "Grenzgebiete" that lies within us--and between us-- that is there wherever we go.

Merging Metaphors and Magical Moments

Walter Berry

Los Angeles, CA, USA

What happens when dream images intersect? Join Walter Berry in this experimental workshop where we will not only draw our dreams on paper and work them, but also merge those drawings into a larger mosaic that will be the creation of a new composite dream which speaks from multiple angles and multiple voices. We will then create a unified narrative that we will act out in a bit of dream theatre. In this experimental workshop, we will draw on paper the metaphoric symbols from our dreams and see how they intersect with the content of other people's dream images, and in so doing create a new dream that will be a communal experience, designed to see how all of us are connected in some deep way to each other and the underlying world of magic that dreams come from.

Using a Jeremy Taylor projective dream work approach, we will have a dreamer draw their dream on a large piece of paper and open the dream through projective dream work. We will then find another dream in the group that in some way relates to the metaphoric images drawn from the first dream and then tell that dream and draw that dream on the same piece of paper, connecting it to the first. We will then add to the drawings with images from other dreams in the room that will be told until we have a mosaic of images that are related to each other. From this we, as a group, will create a single dream narrative based on the elements we have mosaiced together, and then perform this newly created metaphoric communal dream in a dream theatre performance. At the end we will talk about how all of us were affected by this experience and the relationship between our own dream and the collective experience. No acting or drawing experience will be necessary for this journey down the delightful rabbit hole of dreams. There will be a short 10-minute introduction and the rest of the time will be spent in the delightful dive into the work.

An Ullman Dream Discussion with Artwork Produced So as To Revisit the Dream with Friends and Family

Mark Blagrove and Julia Lockheart

Swansea, UK

Mark Blagrove uses the Ullman Dream Appreciation method described by psychiatrist and psychoanalyst Montague Ullman (1996, *Appreciating Dreams: A Group Approach*, Sage Books) to discuss a dream of one attendee at the session with the attendee. Other people present comprise the audience. The stages of the technique are: recall and clarification of the dream; groups members' projections about the dream; dreamer describes their recent waking life; dream is read back; connections between dream and dreamer's waking life are suggested by the group. At the end of the discussion the Gains from Dream Interpretation questionnaire will be completed by the dream-sharer.

As a separate activity, during the session, artist Dr Julia Lockheart will create a painting of the dream onto a page taken (with publisher's permission) from Freud's book *The*

Interpretation of Dreams, incorporating into the artwork the text format and keywords. The event occurs in front of an audience who can hear the discussion and see projected onto a screen the art production. A gallery of these artworks, and rationale for this art science collaboration, including hypothesized empathy changes, can be seen at <http://DreamsID.com>. An enlarged print of the artwork is sent to the dreamer after the event and can be used to revisit the dream with friends and family.

The discussion and painting of a dream is undertaken as part of the Dreams ID (Dreams Illustrated and Discussed) art/science collaboration. The collaboration has had performances at UCLA in October 2018, Swansea Science Festivals in 2016 and 2018, at art galleries / museums at various dates in 2016, 2017 and 2018, and at the Freud Museum London as part of British Science Week in March 2018. It was also part of the very prestigious UK Research Council Festival of Social Science in November 2018, again held at Freud's house in London, where four individuals each discussed their own dream and had an artwork produced capturing the dream. An artwork was a winner at Research as Art 2018 and is being exhibited at the Royal Institution in London (this is a major science venue); two artworks from the project were exhibited in Arizona at the IASD annual Conference in June 2018; and two artworks have been selected for inclusion in the Swansea Open art exhibition at the Glynn Vivian art gallery Swansea (an exhibition opened by Peter Blake in December 2018).

The 2 hour event will be structured as follows: Mark Blagrove, Julia Lockheart and the dream-sharer sit at the front of the room, a video camera points at the painting and art materials and used to project the painting process onto a large screen. The audience in the room can hear the discussion and see the large screen so as to see the painting develop. For 15 minutes, Mark Blagrove and Julia Lockheart describe the Dreams ID project, including its scientific and artistic rationale, and the current research linking the use of dream inspired artwork to increases in empathy towards the dreamer by those with whom the dream is shared. For 75 minutes, Mark Blagrove and an attendee discuss a dream the attendee has had, and Julia Lockheart paints the dream while the discussion occurs. For 15 minutes, Julia Lockheart describes the painting that she has produced, and there is a discussion about reactions to it with the dreamer and the audience, and discussions about the dream. IASD dream-work ethics requirements are followed during all these discussions.

Hermeneutic of Creation and the Integral Approach to Dreams

Fariba Bogzaran

Inverness, California, USA

Integral Dream Practice is a multilayered method of being with dreams, which follows two movements: Reflexive and Reflective. Developed out of the pioneering method of Dream Creations (Bogzaran, 1989), the IDP approach to dreams follows the philosophy of Integral Dreaming (Bogzaran & Deslauriers, 2012) which prescribes that human beings are multidimensional, dreams are multidimensional and ways of approaching dreams have to be multilayered. The workshop

focuses on the idea of the Hermeneutic of Creation and the Five movements of Integral Dream Practice. Stages of IDP will be discussed in depth. The experiential component of the workshop focuses on the first movement of IDP, "Reflexive Phase," which emphasizes the non-interpretative and creative approach to dreams. This phase includes 1) Dream Re-entry: Allowing spontaneous appearance, non-interpretative, auto-poetic. To access the dreaming mind, drumming will be used as a tool to induce hypnagogic experiences. 2) Creative Expressions: Participating in creative acts through automatic writing, drawing, and movement. 3) Poetic Synthesis. Returning to text (dream and dream re-entry) by clustering themes and deducing words to create a poetic synthesis. The second movement or phase of IDP will be discussed, such as Reflective Analysis and Integrative Act.

DreamWork/BodyWork

Jean Campbell

Portsmouth, VA, USA

DreamWork/BodyWork is a process-oriented therapeutic model for healing trauma. This workshop will provide tools for understanding trauma and accessing the source of potential resolution. Workshop participants will gain insight into how the body holds and records information, how that information can be accessed, how dreams and personal imagery contain the information necessary to allow healing. Workshop participants will learn to recognize in the body what might be called the initial trauma in someone's life and how that affects responses to subsequent trauma.

Workshop participants will experience work with their own dreams and images as well as exploring the steps involved in facilitating this process with clients and others. DreamWork/BodyWork is based on the Bioenergetics work of Drs. Wilhelm Reich and Arnold Mindell...as well as the work of Dr. Hector Kuri-Cano, with whom Campbell trained for eight years. Workshop participants will be asked to feel their dreams in their bodies and also to "move in the way of their dream characters." They will work in pairs and in groups to do this. Participants will reach their own conclusions about the meaning of their dreams.

Dreams and Simultaneous Time; Seth's View and the Benefits for Dreamers

David Cielak

Cottesloe, Western Australia, Australia

Understanding the true nature of time as simultaneous has profound implications for dreamers and their dreams, and the ability to understand reality creation using the dream state. The Seth Materials comprise over 30 volumes of material with over 6,000 references to dreams and the dream state across over 4 million words. One of the primary subjects is the nature of time as simultaneous rather than linear. The workshop will provide an overview of simultaneous time, the effects within the dream state and waking reality, and ways to use the dream state to understand time and the use of Seth proposed exercises to help create reality and solve problems in the present. Seth's view that we cre-

ate our waking reality from the dream state is explored and the implications of time as simultaneous is emphasized in particular.

The Seth Materials and dream theory have been in print since the 1970's with over 8 million copies across 30 volumes. Widely studied across the world, the dream practices have been adopted and incorporated by many authors. Physicists widely understand time's illusory nature, e.g., Einstein, and yet mainstream science still maintains a focus on linear time and cause and effect thinking. Seth's view of time takes us beyond cause and effect and into the dream state as a primary source of reality creation.

Outline: What dreams are from a Seth perspective and the various levels of dreams. Freud, and Jung's contribution and limitations and probable realities. Exercise 1: Sensing probable realities and time from Unknown Reality Volume 1.2) Time; linear time, inverted time, simultaneous time, and cause and effect. Seth's view of simultaneous time. Exercises 2 and 3: Expanding time and space in the dream state (from Unknown Reality Vol 2.3). Time as it appears in dreams; Past, Present, the Future and Probabilities; examples such as synchronicities in waking reality from dreams. Exercise 4: Changing the past and the future from the present using the dream state. Participants will use this exercise to practically approach current challenges using the dream state. Time and Dream Matters: Putting it all together. How a widening view of dreams, simultaneous time has implications for dreams and dreamers in a most practical way, so that we can impact health, increase individual and societal functioning. How we can positively impact individual and mass reality creation, event formation and creation and the future, past and present of our planet. Where to from here? Seth's suggestions on the use of dreams and the dream state for individuals including how to recall dreams, awake seeming dreams, projections, the use of dreams in healing, in identifying limiting beliefs. The workshop is suitable for all. The exercises are drawn directly and completely from the various volumes of the Seth Materials. Participants in the workshops are welcome to share their dreams, especially where there is a pre-cognitive element they have noticed. We note that the ultimate authority of the personal meaning of any dream is the dreamer.

Intuitive Day-dreaming

Monique Dankers

Vorden, GLD, Netherlands

Dreams can answer our deeper questions. It's my experience that answers from God/ our higher self/ the friendly universe can also be received during our waking consciousness when we manage to be silent. In this workshop we will try this together and share our experiences to learn from each other. Usually participants get surprising insights. This daydream practice will also offer the participants skills they can apply during their dreams at night.

Introduction: I introduce myself and my vision on dreams. (For me, dreams are messages from my subconscious, containing customized advice for my personal development. They also offer me a broader perspective on key choices I can make in my life.) I will explain how this intuitive day dream technique found me, on a day when I was very depressed it happened.....

Instruction: The essentials of the intuitive day dream technique:

1. identifying your deepest question (While walking we observe the thoughts coming into our mind and notice when we are distracted. Then we go back to observing our thoughts. This is the meditation part to become still. After 15 minutes we conclude, each for ourselves: what is apparently occupying me? (for instance, I notice that I worry about going to the hospital tomorrow) We formulate the main question regarding what that is occupying us in order to incubate the day dream. This question has to start with: How can I...? (for instance, How can I make my own decision if I want to get the treatment the doctor will propose?).
2. Then we open yourself for the answer. This is the dream part: we observe the outer world in the same way as if it were dreams at night. What dream symbol is attracting our attention? (for instance: I see a tree with firm roots that's having a special attraction to me);
3. interpretation of the symbolic dream language. What is that tree telling me? (for instance. I stay firm connected with yourself like. A thunderstorm cannot blow me away.)

Trying it out (The instructions will be repeated step by step.)

Sharing (By what dream symbol your attention was attracted? What did it tell you? How can you apply this regarding to what was apparently occupying you in part 1?)

Dreams and Poetry in Symbiosis through Interactive Storytelling

Harald De Bondt

Moeskroen, Belgium

Dream stories and poems have a similar affinity with symbols and metaphors. I combined texts from both in an interactive story, as this felt a natural medium to do so. The presentation will elaborate on the creative process, the medium and how I want to take this approach into the future. The url for the interactive story is <http://philome.la/BondtHarald/droem/playe>. In an interactive talk, I present the experience of my creative process to work with the large amount of dream stories I had lying around, and my poetry. From this I distilled a practice which can function as dreamwork for therapeutic or creative purposes. I give a practical introduction on how to create your own interactive (digital) story. Additionally, I elaborate on how my background in computer sciences guides me to explore this medium deeper.

introduction: who am I?; Dream stories and poetry: the connection between the two types of text; dream poems: different processes to create poems with a dreaming attitude; how to combine dreams and poems: the creative process and technology used; future ideas for connecting dreams; interactive part (55 min) Making groups of 5 to 10 people, depending on group size (5 min). Gather, as much as possible, textual material on pieces of paper (parts of) (day)dreams, poems, text from any kind of source, preferably without a definite beginning or end and which are rich in images and symbols. (20 min) All pieces of paper are put in the ground and group members can connect pieces of text or words in text through rope. The connection should be

based on creative intuition. (15 min). Group members can traverse their interactive story by following the ropes from piece to piece, if a piece is connected to multiple others a choice has to be made, that's how alternative story lines emerge. If there are several groups, people can traverse the story of others and make connections with their story if they desire. (10 mins). Sharing about the experience and discussion of the concept (15 min) Performative part (15 min): A combination of performance art and poetry.

Resolving Personal Conflict through "Theme" Work

Robert P Gongloff

Malaga, Spain

When we look at the dream as a story and attempt to determine the basic activity displayed by the characters, we can see themes emerge. The theme is the underlying motivation or issue being dealt with by the primary players in the drama. It often represents a pattern of behavior that may be represented by the dreamer in waking life. This workshop is based on the premise that all story plots stem from conflict. Conflict is the emotional impact of the opposing impulses, desires, or tendencies we face internally each day. These opposing forces form the subject matter of our conflicts. These forces are the themes we live out in our dream lives and waking lives. Gongloff considers our conflicts and their inherent polarities to be gifts that motivate us to continually seek harmony and balance. We live in a world of polarities – love/hate, optimism/pessimism, safety/vulnerability. We normally don't have to face the extremes of these conflicts, but in therapy situations we may see clients who only see the extremes – "my world is coming to an end because 'my spouse left me' or 'I lost my job,' or ... (fill in the blank)." It is the job of the therapist or counselor to help the client see that the extremes are not the only possibilities, but that there are ways to achieve balance in one's life. Helping someone achieve harmony and balance in life is a primary function of the therapist or counselor – and can be seen as a major function of our dreams. In this workshop, participants will learn how to determine the themes in dreams and will be given a method for using those themes to take positive action to resolve the conflicts they face in waking life.

In the workshop, the leader will present a quick overview of dream group ethics, then go into detail about what themes are and how to determine them. Following an explanation of the process with examples, the group will collectively explore a dream offered by a group member. Then the group members will be encouraged to explore individual dreams with a partner or small group. After all the participants have determined dream themes, the leader will present specifics on a method for taking positive action in their waking lives to deal with the issues – expressed as conflicts or polarities – raised in their dreams. Approximately 35- 40% of the time will be spent on didactic instruction and 60-65% on experiential work, including individual and group exploration and discussion of dreams and suggested themes.

The Poem in the Palm of the Dream

Loren Goodman

Seoul, South Korea

According to the Talmud, “a dream that has not been interpreted is like an unopened letter.” Might it also be the case that in every dream rests a poem unwritten? The premise of this workshop, shifting from epistolary to poetic, interpretive to translational, and metaphoric to literal, is that, held warmly in the hands of every dream like gems—whether polished or in the rough—pulse one or more poems ready to be released and inscribed. Inspired by the pedagogical techniques delineated in Kenneth Koch’s *Wishes, Lies, and Dreams* (1970), Denise Levertov’s conception of language as a living thing, as well as Koch’s and Paul Valéry’s theoretical explorations and practical applications of their definitions of poetry, this workshop encourages participants to approach dreams as a rich and abundant source for literary artistic production, both in verse and prose. Applying Koch’s equation describing the relation between ordinary language and the language of poetry, the workshop will begin with a series of collaborative improvisational re-workings of Coleridge’s “Kublai Khan”. Continuing our focus on the music of each word, we will read from various collections of dream poems (written by children) that run primarily on sound. Attuned to their movements and formal elements, we will then compose our own dream poems using similar techniques. During the second part of the workshop, we will approach our dreams as encoded material ripe for poetic extraction through processes of translation. Experimenting with Freud’s rebus theory of dreams, traditional Korean methods of dream reading based on the deep observation and analysis of Chinese characters, homophonic translation and automatic digital translation algorithms will lead us to further discoveries. While this workshop will focus on dreams as a source for poetic inspiration and production rather than interpretation, the ultimate authority on the personal meaning of any dream is the dreamer.

Poetry as Dreams

Mika Hadar-Borthwick

London, UK

The poet is the inner dreamer. Poetry uses symbols and metaphors as its building blocks to highlight emotional and cognitive contents. The symbols of a poem surface from the subconscious lakes, the underground sources that feed the dream world. In this workshop, we will write poems and observe the inner contents reflected through the lens of symbols and metaphors. Poetry symbols are of a personal nature, and the keys to their meanings are within the poet’s world. The way these symbols resonate in the reader and evoke a response is within the reader’s world of symbols. Introduction: Mind freeing meditation- visualization; Poetry writing exercises; Looking at symbols; Dialoguing with symbols in pairs; Sharing- the writer and the reader- personal and interpersonal.

In this workshop, she will give exercises to encourage a poetry writing and expression in metaphors, then look at the metaphors and guide the participants to get into an inner

trance state and to dialogue with the poem’s metaphors. Poetry metaphors hold an emotional charge and hidden meanings, very much as dreams do.

Attendees are encouraged to bring ready poems that they wrote or liked, and we can look and dialogue with the metaphors and symbols.

Applying the Waking Dream Process to Dreams and Lucid Dreaming

Nigel Hamilton

London, UK

This workshop focuses on the potential effectiveness of tracking the dream narrative through the dreamer’s body, whilst exploring the dream in the waking state, i.e. the Waking Dream Technique (Hamilton, 2006). When applied over a series of dreams, the client experiences a significant awakening to a deeper, subtler sense of self and healing. This is the Waking Dream Process. A short talk discussing the significance and therapeutic use of the Waking Dream Process in relation to dreamwork will be followed by a practical demonstration, working with a participant’s dream. There will be time for questions regarding the demonstration. Guidelines for clinicians in using this technique will also be discussed. This workshop will provide participants with the basic theoretical framework as well as the opportunity to experience and apply the teaching material.

Waking Dream Techniques: Brief Description: 1. Dreamer tells dreams to guide. Dreamer comments on how they see the dream and whether it relates to anything in their life, past or present. 2. Guide comments on notable (in their view) aspects of the dream. 3. If dreamer is happy, then they close their eyes and guide guides them through the dream, stopping to find out where the different dream images seem to be held in their body along with associated sensations/feelings. 4. This can take up to half an hour. At the end of the dreamwork, the guide sums up their (own) experience of the dream and shares their insights with the dreamer. The aim is to see what is helpful to the dreamer in terms of understanding their dream and realising what it could possibly mean. Usually by this point, the dreamer realises personally what the dream means to them.

Mythic Drawing: Into the Lion’s Den

Keith Himebaugh

Grand Haven, MI, USA

This informative two-hour workshop offers a three-part introduction to a unique archetypal approach to drawing with dreams, called Mythic Drawing. Intended for advanced dreamers, this rare offering will be limited to 12 participants to provide one-on-one interaction. Blending theoretical ideas from depth and archetypal psychology (Jung, Hillman and Aizenstat) with artistic practices, influenced by traditional animation and Pacific Northwest native traditions, Dr. Himebaugh will present an interactive visual introduction to the key principles, highlighting the stories, motifs and personified figures that live in the creative process. Next, the presenter will offer a live demonstration, drawing with one

of his own dreams and describing the inner mythic experience as it spontaneously happens. This rare glimpse into the play of archetypes will give attendees a clearer idea of what Mythic Drawing looks like from the inside out. Special emphasis will be given to differentiating creative impulses as they arise, moving in and out of these attitudes with precision to meet the dream figure in an immersive way. Equipped with both imaginal and artistic tools, participants will then be invited to draw with a dream figure of their own. This session, which constitutes roughly two-thirds of the overall workshop, will include careful guidance and pauses for rich discussion. Techniques gleaned from Dream Tending, specifically dream animation, will be modified to support the artistic process. The presenter will spend time with each dreamer, helping to facilitate a co-creative experience of drawing with fantasy images that deepens a relationship with two or more personified creative impulses. Participants will be encouraged to trust the creative intelligence of their fantasy and dream images, which the dreamers understand best, as stewards of their own personal experiences.

Transformative Lucidity: Dreamwork Techniques for Everyone

Clare Johnson

Marbach, Germany

Dreams attempt to communicate with us every night. They reveal our fears and desires, offer creative solutions, and can transform our lives with their wisdom (Garfield, 1974). We enhance our waking lives by engaging lucidly with the healing potential and deep beauty of our nightly dreams (Barasch, 2000). This highly experiential workshop explores a rich variety of transformative techniques for working lucidly with dreams while awake for wholeness, healing, and insight. These include Dr Clare Johnson's Soul Dream Embodiment technique, her Lucid Imaging Nightmare Solution, and her Lucid Writing method, as well as other popular techniques from her books, Llewellyn's Complete Book of Lucid Dreaming and Dream Therapy (US title: Mindful Dreaming). When we bring conscious awareness to our dreams, through lucid dreaming or by doing waking dreamwork, we illuminate them in potentially transformative ways. We can gain self-confidence, liberate ourselves from the past, take steps to heal negative memories or grief, and expand our creative potential (Johnson, 2017). With the help of our dreams, we can lead happier, healthier lives. From beginners to advanced, this workshop is open to all. The dreamer is recognised to be the ultimate authority on his/her own dream, and all dreamwork in this workshop is explored with kindness and respect. All participants can work on their own dreams, and they will also have the opportunity to share their dreams and process with the group if they wish. Dr Clare Johnson is President of IASD. She has researched lucid dreaming for twenty-three years, and was the first person in the world to do a PhD on lucid dreaming as a creative writing tool. For nearly fifteen years she has taught practical courses on how to access the deep creative and healing potential of the unconscious. She is the creator of www.DeepLucidDreaming.com

References

Barasch, Marc Ian. *Healing Dreams: Exploring the Dreams that can Transform your Life*. New York: Riverhead Books, 2000.

Garfield, Patricia. *Creative Dreaming*. New York: Ballantine Books, 1988 [1974].

Johnson, Clare R. *Llewellyn's Complete Book of Lucid Dreaming: A Comprehensive Guide to Promote Creativity, Overcome Sleep Disturbances & Enhance Health and Wellness*. Woodbury, MN: Llewellyn Worldwide, 2017.

Johnson, Clare R. *Dream Therapy: Dream your way to health and happiness*. London: Orion Spring, 2017.

Johnson, Clare R. *Mindful Dreaming: Harness the Power of Lucid Dreaming for Happiness, Health and Positive Change*. Newburyport, MA: Conari Press, 2018.

Understanding Dream Mentors Through Sensing Channel Method

Cornelia J. Krikke

Salt Spring Island, British Columbia, Canada

In this workshop you will practice embodying dream mentors through various sensing channels (kinesthetic, auditory, visual and thinking/analytic). You will describe the perspective through each of the channels then integrate the strands to experience a magnified understanding of the alternative view being offered by your dream mentor.

The process I have developed rests on Donna Eden and David Feinstein's body of work associated with dominant sensing types: kinesthetic, auditory, visual and thinking/analytic. This work is detailed in their book *Energies Of Love*. In their research they found that these four vehicles of perception/reaction are always active as a base, and that during times of heightened emotion, we each further narrow our perception to one of these four channels. We do this as our way of obtaining vital information from the world and reacting to the world. We can energy test to see which channel is our dominant channel. In a way, Donna and David's work is a 'drill down' to the work of Carl Jung and Katharine Briggs. That said, they focus solely on the three dominant Western sensing types; visual, auditory and kinesthetic, as well as the thinking/analytic.

We now understand that each of us is dominant in one of these channels of experience. For most of us there is also a secondary channel of dominance. As we experience our waking and non-waking life, the lens we use has already been established. Since we were children, we have disproportionately trusted the channels dominant to each of us. This lens tends to isolate in times of stress. Challenging dreams and dream mentors, invoke the same stress response in our dreams as we experience in waking life. Whenever we are reduced to one channel of understanding, our perception diminishes.

This workshop presents an introduction of the Sensing Style method for expanding our compassionate understanding of the messages offered in dreams. In this workshop, I take us through understanding, then isolating each of these sensing channels and finally integrating them in waking life. Next, we practice using the Sensing Style method from the perspective of the dream mentor. Finally, we discuss our shifts in understanding that have come from this inquiry. In the workshop I will discuss and demonstrate the main sensing channels as identified in the work of Donna Eden: *Eden Energy Medicine*. In dyads, participants practice experiencing the various channels, allowing each channel to become dominant. This will likely involve some physical movement. The experience will enhance our understanding of the vari-

ous channels and will also magnify our own experience of embodiment. I will demonstrate using the same techniques with dream mentors. Again in dyads, participants will choose a particular dream mentor from their own dreams, and will practice experiencing the mentor through the various channels. Next, dreamers will work to bring the various channel perceptions of the dream mentor together. If they wish, dreamers will record their experience. Finally, dreamers will share their experience and personal insight. As always, the dreamer is the ultimate authority.

Dreaming Together: Creating a Group Dream

Marja Moors

Heemstede, Nederland

Sharing dreams is as old as humanity. Only recently there has been a big emphasis on the individual and the meaning of his life and his dreams. Many old tribes still live from the 'we' perspective. In these times, the narrow perspective of an individual self is cracking; we need a broader view. The Dreaming Together group is inspired by the work of Gordon Lawrence. In 1982 he started his Social Dreaming experiments at the Tavistock Institute. Social Dreaming concentrates on the dream and not the dreamer. In a group, one associates a recent dream fragment (or, for example, with a picture from a movie) to a dream fragment of another dreamer. This dream sharing happens quickly. After an hour of free associating this way, a group dream is born, in which pictures of our collective future are visible. The dreams of Jewish citizens recorded in Charlotte Beradt's *Third Reich of Dreams* (1968) showed how Jewish people during WWII dreamt the fate that was to befall them. While in daily life they could resist, their dreams told them otherwise. Dreaming can voice concerns of a social nature. Anjali Hazarika describes in *Daring to Dream* (1997) how dreamwork was used in oil industry organizations in India. It effectively demonstrates the application of dreamwork for cultivating corporate creativity. Free associating is the most subversive of activities and disrupts the consensual, rational and finite reality which most people subscribe. It is always expanding the space of the possible.

Participating in a Dreaming Together group is like floating in space without knowing where the collective dream is moving to. There must be a willingness to not know and to get lost. Several experiments in the Netherlands with members of the Dutch Dream Association showed the power of Dreaming Together. As a participant, it gives a strong feeling of freedom not to focus on the meaning of the personal dream. Making space for what is connecting all of us gives a profound sense of peace and fulfilment.

My Journey to Develop Inner Image Healing as a Tool for Personal and Collective Transformation

Fred C Olsen

Danao, Bohol, Philippines

I will describe the evolution of the Inner Image Healing method inspired in 1973 by Carl Jung's quote: "The inner image is a complex function made of many functions that

represent the state of the psyche." The basis of the presentation is rooted in Jung's understanding of "active imagination," "the transcendent function," and extensive research and practice.

1. Background: a. A brief introduction to my personal journey in the context of the political and social climate of the early 1970s that led to the search for the process. b. A brief description of the search and discovery period. c. An introduction to the "inner image," "active imagination," the "transcendent function" and the process of identifying the "many functions" that make up the "inner image."

2. Building Blocks: I will lay out the building blocks of the Inner Image Healing process, along with the relationships to each other block and to the process as a whole. In this phase, short exercises will be used illustrate to anchor the experience for the participants and demonstrate how the process evolved over time. I will share case stories of actual accounts to illustrate how the process was used in each application. This section will make up the bulk of the first hour.

3. Objections and Concerns: We will take the opportunity to discuss various cultural and professional objections to active imagination in general and to this kind of process specifically, along with answers to these concerns

4. Core Exercise: The Inner Image Healing process is generally used with individuals, in relationships and in small groups to explore dreams, issues and physical symptoms. It can also be used to address issues or conflicts shared by a couple, a small connected group, such as an organization, or in a collective where there is a common shared issue, even without a shared perspective. Examples where I have used this approach with a large group: Pre Y2K, First responders to the Oklahoma City bombing, post 9/11. I will invite the workshop participants to select one or more current collective issues to explore through Inner Image Healing.

5. Final Discussion and Summary.

Dream Group Leadership Training

Victoria Rabinowe

Santa Fe, NM, USA

Every dream, no matter how seemingly convoluted, perplexing or frightening, contains a core of knowing. However, effective dreamwork begins in the place of "not knowing," with an attitude of humility and reverence towards the fundamental mystery of the dream. This approach is one of acting as a facilitator, never as an authority. An effective dream group leader endeavors to create the conditions that can produce an opening or evoke an insight. The goal is to coax the elusive essence of the dream to enter the waking world, so that it might illuminate and enhance everyday reality. This is an ever-changing process of discovery in which questions are often more valuable than answers. The group leader is always mindful of the collective wisdom that resides in the group. He or she establishes and safeguards the principles of confidentiality and collegial support, while modeling deep listening techniques that encourage the active engagement of group members as they reflect on the language of the peculiar and idiosyncratic, the irrational and the fantastic, exploring associations and impressions through a safe and open-hearted exchange. This experiential dream group training will guide present and future dream group leaders

to observe participants' dreams from various perspectives, applying collective knowledge of archetypal psychology, mythology, literature, history, religion, science, and sacred geometry. Dream-sharing discussions will expand upon contemporary techniques pioneered by Steven Aizenstat, Gayle Delaney, Jeremy Taylor, Montague Ullman, Jeremy Taylor, James Hillman, Robert Johnson, as well as original methods in the Art of the Dream™ innovated by Victoria Rabinowe. This workshop is for all conference participants who want to establish a new or enhance an ongoing professional or peer dream group. It will expand, deepen and enrich the creative tools for professional psychotherapists and spiritual guidance counselors; it will open up creative styles of dream inquiry for educators and artists; it will emphasize fundamental ethical guidelines for all.

Poetry of the Soul: Conversations with Psyche

Victoria Rabinowe

Santa Fe, NM, USA

The creative genius of the night mind: Our dreams are the muses that come in the night. Those of us who have fallen under the spell of writing mythic reinventions of our dreams have become enchanted by the world of mystery and paradox. For those who care to look, the subtle underbelly of a dream is lyrical, harmonious and sublime. Balanced in perfect proportion, polished with a sure eye, the organization and genius of each dream is stunning. Dreams are dagger sharp, ever on target, never off key. Once opened through creative writing, each dream reveals its perfect pitch. Our nightly dreams are the repository of our deepest memories and feelings. They call to us from the innermost center of our being. They touch us in our tenderest places with the depth of our longing, our joys and our sorrows. They enchant us with euphoria, they arouse our passions, they frighten us, they inspire us, they fill us with wonder. Yet, the dreams of the night are not easy to decipher. To reveal complex messages, dreams speak to us in metaphors, symbols, paradoxes, and shifting shapes.

Consequently, we must learn to translate the language of dream images with our imaginations, not with rational systems of logic. When we reenter the dream landscape through literary adaptations, we are meeting Psyche in her own language. Through the practice of writing of poems, we can learn to decrypt codes and unravel riddles. Wild stories of the night invite us into a world where we have permission to give voice to indefinable yearnings, inexpressible anguish, indescribable beauty and ineffable ecstasy. To step across the threshold of a dream with a pen in hand is to enter a world of enchantment. Intuitive, reflective writing offers us a chance to experience inner vision with the wonder of a child and the sophistication of a master. The power of dream poetry helps us to transcend the primeval fear of the unknown. It can be painful work, but it produces a strong vibrant portrait of our souls. Our dreams bring stories of blood as well as inspiration, death as well as life. Dreams are often about our dark forces, having very little to do with beauty. Yet, the despair that stems from the struggle of the soul, colors our dreamwork with gut-wrenching authenticity. The expressive arts provide a mirror image of the shadowy realms, with all their treasures. What we have kept inside is invited to come out. By creatively releasing our emotions, over-

whelming feelings can be purged in a healing and wholesome way. Creative dreamwork gives us permission to feel what it might be like to be free from impurities and cleansed in spirit. We can flush our wounds with words. Writing with humor and pathos can shift our perspective. Freed from the restraint of holding back, we can emerge restored, renewed and revitalized.

Fill your dream journal with a variety of techniques to develop a DreamWriting practice. Dream images will reveal complex messages as you explore metaphors, symbols, paradoxes from shifting perspectives, Provocative prompts will guide you to write with passionate insight and deeper understanding of your inner mysteries.

Dream Haiku

Asha Sahni

Bristol, England

Dreams invite writing, whether it be writing about the dream itself or writing inspired by the dream. We will explore a dream/dreams through the writing of haiku, a short Japanese poetic form which can capture the essence of a moment, an image, a dream... Workshop participants will have the opportunity to write haiku which explore their dreams from different perspectives. Haiku offer the opportunity to flex your writing muscles using a short poetic form which does not demand great artistry. All that is required is focused attention on the dream at hand and a willingness to play with words. The brevity of the haiku form means that words have to be chosen and crafted with care, meaning stripped to essence, images painted moon bright. Haiku can surprise and delight, uncovering insight, capturing joy. During the workshop you will have the chance to write both on your own and with others and to share your dream(s) and poem(s) if you wish. All workshop participants are asked to respect the dreamer's authority on the personal meaning of their dream.

The workshop will follow the structure below: 1) Welcome with short explanation, with examples, of the haiku form. 2) Identification of/sharing of dream(s) to work on during workshop. 3) Exercise 1 – writing haiku using key dream words. 4) Exercise 2 – writing haiku following sharing of writing/ the writing process and feedback. 5) Exercise 3 – writing a collaborative dream poem using haiku. 6) Review of writing produced during workshop with space for written and verbal reflection. 7) Close.

Dreaming Our Way Back Home: A Psycho-Spiritual Approach to Dreamwork

Linda Yael Schiller

Watertown, MA, USA

Our dreams take us on journeys to both our psyche and our spirit. By utilizing an integrated mind/body approach to dreamwork, we can engage with multiple layers of our dreams and use their wisdom to journey home to our highest and best selves. This workshop will invite participants to experience a variety of body/mind/spirit approaches to getting to the heart of the wisdom of the dream. As always, the final

authority on the meaning of any dream lies with the dreamer him/herself. This method of dreamwork is based on over 30 years of experience working with dreams and dreamers in both clinical practice and non-clinical dream groups as well as training in EMDR, energy psychology, somatic treatment approaches, Kabbalah and shamanic practices. Personal experience with hundreds of dreams and dreamers, as well as a 35 year practice of psychotherapy treating trauma, loss; both acute and chronic, and attending to crises of daily life and of spirit have allowed me to develop this integrated method where we learn about our inner dream life from not only the top down; from our mind to our bodies, but also from the bottom up, from our felt bodily senses and emotions to our understanding. This approach will be explicated in the workshop, and the motif of "journey" by using the template of both the Wizard of Oz and Jung's Hero's Journey will be utilized to highlight the process. Following this introduction, a number of psycho-spiritual and body based methods of dreamwork, such as active imagination, somatic experiencing, focusing, the GAIA method (Guided Active Imagination Approach developed by the presenter) and the PARDES method (also developed by the presenter) to examine the layers of a dreams will be shared and utilized to work with dreams.

Tarotpy® & Dreams: Healing the Relationship with the Archetypal Masculine

Lauren Z. Schneider

Santa Barbara, California, USA

This workshop demonstrates Tarotpy, along with dreamwork, as an alchemical tool aimed at revealing the "authentic self" through imagery. Images can provide a roadmap for transforming relationship dynamics and aligning with invisible intelligences at work in the personal and collective psyche. This presentation focuses in particular on healing the relationship to the Archetypal Masculine through Tarotpy and dreamwork.

The archetypal images of Tarot, Soul Cards, Tao Cards, etc. come from the same psychic pool as dreams. Tarotpy shows meaningful correlation between dream material and waking life imagery. Tarotpy is an innovative method to enhance the practice of dream work and enter dreaming consciousness with eyes wide open.

Encountering the world of images requires and cultivates a psycho-spiritual faculty of perception. The closer we are to the imaginal realm – working with dreams and divination tools such as Tarotpy – the more transparent we are to its intelligence, and the less attached to our personal or collective ego constructs. We approach the images without preconceived ideas or "meanings." We are present to Psyche as she expresses through images, and we are guided in a co-creative process with the material. There is a reciprocal relationship that happens: this focus of attention begins to heat up the image. This in turn inspires our active imagination which then enlivens the spirit within the image. In this shared state of inspiration between active imagination and the "living image", a communication materializes. We develop a personal relationship with the imagery so that meaning, insight and shifts in perception arise from within each individual.

By inviting synchronicity into a ritualized and sacred space, Tarotpy sets the stage for an extraordinary experience to occur. Synchronicity is like a glitch in the matrix, momentarily cracking open the calcified illusion of separateness from oneself, one another, the natural world, the realm of dreams and spirit. Synchronicity allows us a momentary glimpse of and alignment with Soul. This encounter with oneself and/or the Divine activates healing and wholeness.

Alchemy is the work of enhancing and accelerating the natural desire of all living matter to become "gold." Something from within us desires to evolve and become our highest value. To this purpose, we may observe that dreams come in service of our healing and evolution. The magic of synchronicity may suggest that we exist in an interactive universe that is purposefully and intelligently organized to evolve the material (us) that inhabits it. Tarotpy, like dream work, is an alchemical process to observe, enhance and accelerate what wants to evolve within and through us.

While this is not an introductory workshop on Tarotpy, the didactic (1/2 hour) and experiential material (one to one and 1/2 hours) is appropriate for any and all participants. Also, the workshop can be open to any size group as participants will be divided into dyads or triads to have supportive input from fellow participants.

Participants will be guided in using Tarotpy to gain further guidance on a dream and/or personal material. They will reflect on images by using methods of dream work including the Projective Approach, active imagination, automatic writing, association, amplification, archetypal analysis, and Embodied Imagination. Participants develop their own relationship to the images and meaning. (They are the ultimate authority.) In small groups, participants will practice the Projective Approach in reflecting upon one another's layouts.

Try Dancing Your Dream!

Misa Tsuruta

Tokyo, Japan

This workshop is designed for those who want to move their body during the conference. Dance/movement stimulates and activates physical, mental and emotional awareness. By releasing physical tension one can concentrate on tasks at hand more effectively and deeply. First, some introductory talk will be delivered. Then, participants will be provided with 3-4 musical choices they will dance to. Each participant can choose a dream they dance about, they can combine multiple dreams or they can just dance and move without any dream images or memories. After each musical piece and dance, a discussion will be conducted where participants can share their feelings and experiences. The session will then close with some time for dancing together.

Collage Dream Play: Experiential Workshop

Johanna Vedral

Vienna, Austria

A photocollage is like a dream on paper. Collaged dream images lead us to dream narratives. Collage Dream Writing is based on Expressive Arts, Creative Writing, SoulCollage

(Seena Frost), Collagen-Therapie (Charlotte Kollmorgen) and creative dreamwork. In this workshop, we first dive into the imaginal realm via provided photocollages. Then the participants will create a photocollage and write down their personal dream narratives, emerging from the collages. Afterwards, we focus in dream sharing tandems on responding to the core emotions of the dreams. The “ultimate authority” on the personal meaning of that “interpretation” is the Dreamer/ Writer. There is no interpretation, but there is reflection and mirroring! Surprise yourself in a creative encounter!

Exploring Patterns of Connection with Social Dreaming

Nicola Wreford-Howard

Wassenaar, Netherlands

“It is important to discriminate between those systems of meaning which are designed to open up the creative possibilities of living, and those which in effect delimit the choices available to individuals”- Gordon Lawrence. Social Dreaming is a practice of working with shared dreams with the purpose of exploring patterns of dream images and associations in regard to the collective social circumstances of groups, teams, organizations, communities and society we live in. This presentation gives an introduction to the art of hosting Social Dreaming for social integration & innovation. Whether for strategies, ideation, innovation, negotiation, understanding conflict, communications, consultancy, collective artistic endeavors, Social Dreaming has been instrumental in advancing our mutual understanding, interconnectivity and creativity in the groups and organizations in which we live and work.

The presentation will provide an overview of: •History and development of Social Dreaming in the past 40 years; •Theory, terminology and practice; •The SD host role: basics and emerging experiences; •SDM applications and design via case studies; •Discussion & links to further learning. Handouts:•The Practice of Social Dreaming: Guiding Principles; •Social Dreaming: Making the unconscious available in systems; •Creative Role Synthesis

4. Clinical Topics

Interconnected Dreaming: Revealing the Unconscious through the Combined Dreams of a Therapeutic Team

Marta Aarli

Boulder, CO, USA

Combining the dreams of five members of a treatment team - one client and four psychotherapists - over a five-year period, Marta weaves their dreams and waking life experiences together, to create new insights that inform the clinical treatment and deepen the mutual recovery of all the team members. In the Windhorse model, a team of psychother-

apists works with an individual client, often for five or ten years, and sometimes longer. Over time, the team observes a group dynamic that is referred to in Buddhist terms as Tonglen or exchanging oneself for others. One team in particular inspired Marta to start tracking and combining the dreams of its five members, the client and four therapists, into a story of inter-woven dreams and waking-life experiences, to reveal the unconscious dynamics of the team. In the process, it sometimes became difficult to distinguish whose dreams were whose, as the collective experience, or the dreams of the team itself, started to be revealed. Because this is a contemplative approach, the therapists work with their own states of mind in order to more fully understand what is happening inside the client, who may not be aware of or able to verbalize these feelings and insights.

Dreams are one way of tuning in to these unspoken layers of experiences, especially through the combined expressions of the unconscious of all of the team members / dreamers. Many schools of psychology look at the dreams of the client, but we can take this to a deeper level when we look at the therapists' dreams as well, and then weave them together over a period of time, to reveal the developmental stages of connection and growth happening on an unconscious level, within the whole system of the team, acknowledging the mutual benefit to all team members. The advantages of this whole-person approach are a more fully integrated healing process that encompasses all aspects of the client, and the acknowledgement of mutual recovery, the value that the client's life has in the lives of the therapists - that we are all fundamentally sane and valuable and interconnected human beings.

Heart Operation, Dream Symbols and Transformation

Ann Bengtsson

Drammen, Norway

By having a sudden collapse of the cardiac valve called the Miter, situated between the left atrium and the left ventricle, the author had to go through a heart operation which also involved a psychological and spiritual transformation. The physical circumstances as well as the psychological and spiritual process showed themselves through dreams. By taking notes of the dreams, she recognized a certain pattern and a shift of dreams after the operation. By going back a few years she also noticed a transformation-dream leading forward towards the actual event. The presentation will detect certain dream symbols and describe how a physical operation can have a deeper meaning and maybe also be necessary in pushing forward the transformation process.

What if . . . (Panel “Bringing Dreamwork into Institutions”)

Sheila Benjamin

Tulsa, OK, USA

Imagine a young girl holding a dandelion that has gone to seed. She is preparing to blow all of the seeds into the atmosphere. Who knows where they may land? Introducing

the study of dreams to the at risk teenagers that I have been working with over the past 8 years, is very similar to the young girl getting ready to blow those seeds everywhere. My desire has always been to aid these youth with broken hearts learn through their dreams to begin to have some insight and clarity into themselves and their lives. I never know where my seeds of inspiration, of clarity, of peace will land. However through the years I have had the privilege to gaze into some amazing eyes that have been filled with depth, hope and awakening. These teenagers have shared some awesome stories and have some great experience that I would love to share with you. Through this presentation I will share my journey over the past 8 years from the dream study programs I have offered at the residential treatment facility I presently work at. I will share the dreams and the insight that many of these children have had, from the visitation dream that a young girl had after a friend of hers was killed in a plane crash, to the insights of another as to why she even began hurting herself, to the recognition of a young man that was nervous about returning back home. In my journey throughout my Metaphysical studies and especially through my work as a Recreational Therapist, working with at risk teens, I find it my calling to discover ways to help others answer the three most asked questions of life. Who am I? Why am I here? And where am I going? One of the most profound ways I have discovered for myself and with those that I have counseled is through dream work. Dreams give us that inner connection with our souls, our spirit, and our divinity. There is a great YouTube video that one of the teens in my dream group shared with me that totally explains why it is important to even try to introduce dreams in settings that may at first have some resistance. (Diamonds are created under pressure), the name of the video is per-spectacles (this is the correct spelling of the video). I am hoping to be able to share this film with you.

Dreaming Wellbeing: A Mixed-methods Study into the Therapeutic Benefits of the Waking Dream Process

David Billington

London, UK

David Billington will present findings from, and reflections on, a multi-year study of the effects of the Waking Dream Process on the psycho-spiritual wellbeing of psychotherapy clients. The small-group study's methodology included well-being scales, scales of dream attitude and experience, and qualitative methods, including Thematic Content Analysis (TCA; Anderson, 2007) to draw out themes in interview transcripts. The Waking Dream Process (Hamilton, 2014) is a method of revisiting dreams by engaging the body and imagination to facilitate psychological integration and personal development. It is an established methodology for working therapeutically with dreams from a psycho-spiritual perspective (i.e., inclusive of psychological and spiritual dimensions of experience). This includes engagement with mind, body, feelings and emotions, and transcendent or transpersonal aspects of consciousness. At the 2015 IASD conference, David presented a pilot study, which found that the Waking Dream Process supported positive changes in mental well-being and attitudes towards dreams. He pre-

sented a brief recap of the methodology at the 2016 conference. In 2019, he will present the combined findings of the pilot and the follow-up study, which applied an updated methodology to the experiences of new participants in three therapeutic groups using the Waking Dream Process for 1 or 2 years. He will also reflect on the benefits and limitations of the research methodology and process.

This will include the development of the Dream Scale to measure dream attitudes and experiences in a transpersonal context, and the problem of reductionism due to methodological and ethical constraints. He will compare and contrast his own experience in a Waking Dream Process group to illustrate the parallels and differences between the study's findings and his subjective experience.

Dream Inquiry with The Work of Byron Katie

Monique Dankers

Vorden, GLD, Netherlands

The Work is a meditative process used to explore stressful situations that we experience when we are awake. Byron Katie, the founder of The Work, has indicated that this inquiry process is also valuable to get dream situations clear. This is a report of my experiences facilitating clients and myself. Sequential summary of the presentation:

1. Introduction: I introduce myself and my vision on dreams. How The Work found me and why I am so excited to use The Work for my dream inquiry.
2. What is The Work of Byron Katie? For dream workers, I paint a picture of how The Work is done, taking my own dream as an example. If you are someone used to doing The Work, I provide an example how The Work is applied to a dream situation.
3. Benefits of dream inquiry with The Work: For dreamers, dream inquiry with The Work has a number of advantages which I will illustrate with examples from sessions with clients' memory. In order to be able to inquire a dream with the Work, you only need to remember very little of your dream. During the completion of a worksheet and during contemplation on four questions, forgotten dream fragments often come to the surface of our memory again. Symbolism: The Work enables us to understand our own personal dream language. Dream language: During the meditative inquiry process of The Work, our consciousness shifts from dualistic analytical thinking into the direction of the holistic understanding. That is valuable as we get free access to what our dream wants to let us know. Completion: By finding examples for the turnarounds, we finally bring the dream to an end in a healing way. Disadvantages of dream research with The Work: Clients who are not experienced in The Work has less positive results even with a facilitator. It is more difficult to learn to do The Work on dreams than on daily stressful situations. Recommendation: It is my wish that dreamers take the opportunity to experience The Work and that more Workers become open to inquire about the messages that the universe sends us through our dreams.

The Wisdom of Dreams: Casting Light on Alchemical Research

Debra Deaville

London, UK

Debra Deaville's presentation on "The Wisdom of Dreams: Casting Light on Alchemical Research" will demonstrate how dreams provide valuable inner guidance on a research journey. Personal examples will be used to illustrate how dreams can illuminate various stages of a work in progress. The audience will also be invited to participate in the experience of entering into a transpersonal dream. The presentation is based on Debra's current PhD research.

For the audience participation in the process of a dream, Debra will invite the audience to participate in the experience of entering into a transpersonal dream. Drawing on the process and methodology she has discovered for her PhD research, Debra will guide the audience through an experience that illuminates the process she has described. This presentation will be of interest to all who are interested in research and the transpersonal perspective.

Sequential Summary: 1. Introduction 2. Short description of PhD research project 3. Dream 1 – The research proposal 4. Dream 2 – The upgrade stage 5. Dream 3 – The creative synthesis 6. Audience participation

The Dream Interview Method (DIM)

Gayle Delaney

Mill Valley, CA, USA

A transparent, secular, and existential interview approach to interpretation that eschews theoretical meta psychologies in favor of eliciting from the dreamer descriptions that trigger the dreamer's recognition of the metaphoric meanings of the dream without theoretical contributions, projections, or intuitive suggestions from the therapist or dream partner. The interviewer's tools are curiosity, the discipline does not interfere in the dreamer's process, a corpus of carefully honed, and non-leading questions (the Cue Card) posed by the interviewer whose POV is that of an alien who knows little and presumes to know little about the dreamer's world. The focus is to elicit the dreamer's words that trigger for him or her a recognition of the metaphoric bridges or parallels to the dreamer 's life situation, and the point of the dream story that offers new insights to resolve issues or generate new ideas and POVs that solve problems and create new possibilities in the here and now. DIM is most easily learned in dyads or group settings, but is most often practiced by the dreamer alone playing both roles of dreamer and interviewer. This method is conceptually easy, but requires practice and discipline to master tendencies to project, or to impose received, traditional meanings into the interview. To encourage the use of dreams in various settings, including perhaps the most difficult, general medical practice, the interviewer learns to pose highly efficient questions, and keep the dynamic thrust of the dream moving using a variety of techniques that assist the dreamer to focus on the facts and metaphors of the dream images in the specific dramatic context of the dream. After the interviewer invites the dreamer to link the dream images, feelings, and actions

of the entire dream, the dreamer is invited to describe any actionable insights or meditations that it might be useful to practice in the near future. After having completed the interview, the therapist or dream partner might ask the dreamer if he or she is interested in entering a post-interview phase of dream amplification, proffered projections, or suggested interpretations offered by the therapist. This presentation will include illustrative examples drawn from 40 years of a training practice focused entirely on dream work and dream incubation with therapists and amateurs.

A Suggestion for a New Interpretation of Dreams: The Theory of Maladaptive Belief Awareness

Joshua Eichler-Summers

Edinburgh, Scotland

Joshua Eichler-Summers (M.Sc. Psychology of Mental Health, B.Sc. Economics, Foundation in Counselling and Psychotherapy) presents an alternative interpretation of dreams. Using his experience with dreams from his own therapy, his counselling work with others and results from relevant neurological studies, he proposes a theory that dreams are "inverse catastrophizing". This reversal of waking catastrophizing (where we imagine extreme situations which call for us to take conservative action) means that we generate situations which clearly call for less anxious behaviour than the behaviour we take in our dreams. This difference between the behaviour the situation calls for and the behaviour we take highlights where our interpersonal beliefs are overly anxious. Joshua explains how dreams, when interpreted in this manner, result in awareness of maladaptive beliefs, and explains why this awareness is fundamental to successful therapy. The theory is used to make predictions of in-dream behaviours, meaning that a traditional scientific approach can be taken to the theory's evaluation. Current research activity on the theory is outlined.

Presentation structure: 1) Waking catastrophizing explained with example; 2) Neurological differences between waking catastrophizing and REM sleep; 3) Interpretive theory presented and compared to existing frameworks; 4) Three examples of dreams with interpretation with therapeutic use; 5) Three examples of successful prediction using the theory; 6) Current research; 7) Suggestions on the species' need for dreams.

Navigating the Dreamwork Divide: Unique Experience or Waking-life Commentary?

Leslie Ellis

North Vancouver, BC, Canada

In writing my forthcoming book on the clinical use of dreams, a dialectic emerged repeatedly regarding the nature of dreams and our relationship with them as we engage with them in the process of therapy. There are two distinct camps: On one hand, there are dreamwork methods that have a clear purpose to forge links between the dream and waking life, and to glean what personal insight and direction one can from this deep process. At the other end of the spectrum are methods that encourage a deep

experience of the dream in order to allow the dream to work on us rather than the other way around. I will present each method in turn, with clinical examples and then offer/invite a discussion about this dialectic, and the question: can we simply use both ways with the dream, or what happens if we choose?

It is clear that dreams are multi-layered and may serve many purposes. My aim here is not to simply state the obvious: that both ways of working with dreams can be useful, and that there is much crossing and overlap possible between these ends of the spectrum. For the purposes of discussion, I will explore what might happen if we make a definite choice. If we view dreams as deeply personal messages, what are the implications for dreamwork? How do we understand the memory sources in dreams? How might we deliberately harness the power of dreams for memory consolidation and emotional regulation – in effect bolstering the therapeutic effect dreams already bring? If we view dreams as transpersonal, how then do we approach the dream? Here we explore the deeply experiential, embodied dreamwork practices that reconnect us with our original dream experience by re-entering the dream landscape. This modality offers deep respect for the dream and brings a question of how the dream might expand us, or how we might then act in service to our dreams, rather than them to us. What is lost or gained by making a clear choice? In the end, I think this choice is highly individual and can be guided not only by the therapist, but also by the dreamer and the nature of the dream itself. It may be a developmental process, with one approach leading to the other. Living this question rather than seeking a definitive answer can lead to a more nuanced and conscious approach to working with dreams.

This lecture (which could also be taught as a workshop) is designed to enhance the clinical use of dreams. It explores theory of dreamwork, and a variety of methodologies. Clinical examples from my practice tend to be mostly Jungian and embodied/focusing-oriented. All methods presented consider the dreamer to be the final authority on the dream.

Intro, Ethics, Jung, Gestalt, Ullman

Robert J Hoss

Cave Creek, AZ, USA

This Foundational Course is an introduction to the basic foundations of dreamwork. It begins with a brief evolutionary history of key contributions, along with IASD ethical principles. This is followed by a more in-depth introduction to three of the great luminaries that had a lasting influence on modern day dreamwork: Jung, Perls (Gestalt) and Ullman. Many of the approaches we use today in our multitude of dreamworking methods were pioneered to some degree by these three. Their approaches will be described and illustrated in a comparative analysis using a single dream example with all 3 methods. While Freud popularized the notion that dreams are meaningful, the understanding of dreaming and the practice of dreamwork evolved dramatically both within Freud's time and ever since. Carl Jung was a colleague of Freud's but differed on the nature of dreams and the approach to working with them. At the same time others were evolving and expanding the understanding of dreams

including Alfred Adler, Samuel Lowy, Thomas French, Erika Fromm and Erik Erikson. Fritz Perls and his wife developed Gestalt therapy, which was part of a movement toward non-interpretive, humanistic approaches. Ludwig Binswanger, Medard Boss, Eugene Gendlin, Carl Rogers, James Hillman, and Montague Ullman were part of the growing Existential-Phenomenological movement which began to distance dreamwork from interpretation by a therapist to that of the dreamer's own meaning emerging from their encounter with the dream and connections to waking life. In 1993 IASD developed a dreamwork ethics policy which recognizes the dreamer as the decision-maker regarding the significance of the dream. Following the historical brief, the session will then focus on three of the many great luminaries that perhaps stand out as unique in the development of theories and approaches that have influenced modern day dreamwork: Carl Jung, Fritz Perls and Monte Ullman. Carl Jung (1875 - 1961), Swiss psychiatrist and psychoanalyst, contended that dreams do not disguise (as Freud assumed) but rather express, in symbolic form (the language of the unconscious), the actual situation in the unconscious. He considered the dream to be projective or future focused, the images frequently representing emerging forces in a person's life as opposed to past infantile sexual urges and wishes. He rejected Freud's "free association" in favor of personal exploration using three approaches: Amplification - exploring the dreamer's own associations; Archetypal - a subjective exploration of the unconscious processes taking place; and Active Imagination. Fritz Perls (1893 - 1970), the noted German-born psychiatrist and psychotherapist, co-developed Gestalt therapy, which uses role-play to identify and resolve emotional impasses and bring closure. Gestalt means "whole" and the method aims at re-owning the fragmented or "alienated" parts of the personality.

Montague Ullman (1916 - 2008) introduced the Ullman "method" in 1979, which he termed "dream appreciation". It is an approach to working with dreams in a group setting which is widely used today - in both clinical as well as non-professional dream groups. At the core is the aim of "respecting the privacy of the dreamer and his authority over the dream." It is perhaps best known from the phrase "If this were my dream..." After describing each approach, I will use each one in a comparative illustration to show how they might approach the same dream. The information in this course can be found in two sources: 1) *Dream Language* 2nd Edition, Hoss, R. (2018) FREE PDF DOWNLOAD on www.DreamScience.org. 2) *Dreams: Understanding the Biology, Psychology and Culture*, Hoss, R., Valli, K, Gongloff, R (eds.) (2019) ABC-CLIO.

Transformative Dreamwork

Robert J Hoss

Cave Creek, AZ, USA

This Foundational presentation details an integrative dreamworking protocol, based on a unique combination of approaches influenced by Carl Jung (Amplification, Archetypal, and Active Imagination); Fritz Perls (Gestalt Role-play) and research into the emotional significance of Color. It consists of 3 phases: Exploration, Insight and Action, that go beyond insight or simply understanding the dream but explore underlying emotional conflicts and the dream's attempt at

resolution – in order to guide an action step that can be applied in waking life.

The logic behind the structure of the protocol is the observation, by various psychologists (including Jung and Perls) and contemporary researchers, that the dreaming mind works to problem-solve, to help us adapt to waking life as well as to bring about a transition to a new state of being characterized by new insights and a new attitude. The design therefore is intended to apply dreamwork in a way that follows the natural adaptive learning and transformative processes of the dreaming mind.

Carl Jung (founder of Analytical Psychology) observed that dreams contain a “transcendent function” which brings about a transition from our existing state to a new state characterized by a new attitude. Ernest Hartmann stated that dreams make new connections that help to establish our emotional sense of self and reveal new insights. Recent waking and REM state neurological studies suggest that the dreaming brain has a capacity for problem-solving, learning and re-consolidation: recognizing that a problem exists; introducing counterfactuals or “what-if” resolution scenarios; and emotionally reinforcing those that work and rejecting those that don’t. Working this way with the dream, as the dreaming brain does, guides the dreamer along their own internally driven path, which may be more effective than reliance on external rational, dialog-driven approaches. The presentation will detail the protocol and the logic behind each step and illustrate it with a dream example.

Further information can be found in two sources: 1) Worksheets and the e-book *Dream Language 2nd Edition*, Hoss, R. (2018) FREE PDF DOWNLOAD on www.DreamScience.org. 2) *Dreams: Understanding the Biology, Psychology and Culture*, Hoss, R., Valli, K, Gongloff, R (eds.) (2019) ABC-CLIO; 3)

References

1. Hoss, R., Valli, K, Gongloff, R (eds.) (2019). *Dreams: Understanding the Biology, Psychology and Culture*, ABC-CLIO
2. Hoss, R. (2016). *Dream to Freedom Method, Working with Dreams and PTSD Nightmares* (J. Lewis and S Krippner, eds.), p. 225, Santa Barbara California, Praeger.
3. Perls, F. S. (1974). *Gestalt Therapy Verbatim*, Bantam Books, Real People Press, pp. 27-76

A Small Group as a Container for the Deep Dreamwork

Katarzyna Kaminska

Katowice, Poland

The paper will present the application of the concept of container proposed by W.Bion, an original and influential British psychoanalyst, to dreamwork with a small group. The container role of maternal reverie is indispensable for healthy development of the individual. How can the small group function as a container for unconscious elements of participants and promote the growth of the whole personality? The bases for presentation are W.Bion’s theory of thinking, of dreaming with special interest for “container” in the development of the individual; my longterm, 20 years, psychodynamic psychotherapist’s practise (with individuals and groups); my practise as dreamworker especially with small groups; my experience of being participant in dream group.

Summary of the presentation: First I will present my personal astonishing experience as a participant of the dream group. Then I will present the process of researching the theory, describing experienced phenomena. Then I will describe my own path as a dreamworker. As a pioneer of group dreamworking in Poland, I was challenged by the formation of the group of people interested in dreamwork. At the beginning I had to work with a small group (3-4 persons). I took advantage of being a pioneer and I tested different methods of working with the dreams and I observed the phenomena occurring in the groups - the same phenomena regarding the process of thinking and mental development I could observe in the therapeutic groups. They followed the same path as the evolution of emotional experience into the capacity for thought in the early stage of the child. The most important factor for such growth is the container role of maternal reverie, which has a containing and transformative function. Having observed it, I realised that the small dream group could be used as a container for the deep dreamwork. At the end I will present some ideas of Bion’s theory: the dreaming, the thinking, the container, maternal reverie, alpha function. I will try to demonstrate both the utility of applying such concepts in thinking about the group dreamwork and their usefulness in practise. “If the patient cannot transform his emotional experience into alpha elements, he cannot dream “ wrote Bion in *Elements of Psycho-Analysis*.

Initiatory Dreams

Sonia Lyra

Curitiba, PR, Brazil

To Carl Gustav Jung (1875-1961) in his Analytical Psychology, as dreams are loaded with images and emotions, they represent the windows of the soul, and the purest essence of the human psyche, having autonomy over consciousness. For other authors such as Anselm Grün, dreams prepare the spiritual path, glimpsing the relationship of man with God. In the book *O Elixir Vermelho... muitos falam de amor...* (Lyra 1999), among a series of a woman’s dreams, 178 are pointing to one direction: the Center of the Soul and its possible integration with the self or ego. In these dreams we notice the presence of initiatory dreams that announce the psychic / spiritual evolutionary stage in which the dreamer finds herself, as well as a passage to a new level of consciousness. This article presents this kind of dream, which does not appear either in Jungian dream’s classification, or among other authors who work with dreams, remaining therefore an unpublished work. Such dreams come from a deep layer of the unconscious called the collective unconscious. It is constituted by forces with a capacity to generate transformation: the archetypes. They themselves don’t have an image. They are like clothes representing them, diversified according to the cultures but with the same underlying proposal and patterns of behavior. They can therefore be interpreted. For example, the title of the book *O Elixir Vermelho* is a synonym for the philosopher’s stone or golden flower in alchemy and is also the central image of the prospective dream, revealing in advance the implicit prognosis: the possible process of individuation. However, in our understanding this still is not an initiatory dream. In one of the initiatory dreams that we will develop throughout the presentation,

the dreamer is going through trials that are leading her to an initiation path. Initiation requires that the human being explore the depths of emotional intensity within himself and be able to withstand revelation. In terms of ancient religions, it can be said that through participation in various stages of initiations into the mysteries, the human being is “born again” and becomes a “twice born”. In the past, such initiatory processes were carried out in temples, but nowadays it can be said that they occur in the dreams, and the dreamer himself becomes the temple where emotional experiences can take place and that will lead him to the confrontation with himself, his own instincts, his own strength. He has to experience himself to the fullest. To eat his own flesh and drink his own blood, this is the anthropophagy necessary to heal the conflict hitherto projected, in order to reach a new level of consciousness. He must celebrate one last supper with himself, which means that he must accept and recognize the other in himself. Among the many interpretations that the dream offers, we will especially address the hat / crown – symbol of power and sovereignty, especially when it comes to horns – as the image of the new moon.

Listening to the Dreamer

Michael Schredl

Mannheim, Germany

Over the years a large variety of approaches to work with dreams have been proposed and put into praxis. This approach is based on the client-centered therapy developed by Carl Rogers. Interpretations in any form are discouraged because the interpretations reveal more about the interpreter than about the dreamer. Even the dreamer herself/himself is not encouraged to use interpretative methods. The group will learn to ask open-ended questions to stimulate the dreamer to think about the links between the dream (emotions, cognitive patterns, and the way the dream ego acts) and current waking life issues. The basic principle of this approach is that we can learn from dreams in the same way we can learn from our waking-life experience. A focus within this method is to look at basic patterns of the dreamer's action. E.g., a typical dream of being chased includes the emotions fear/panic and running for one's life. This basic pattern could be simply called avoidance behavior; i.e., a dream of being chased – as a dramatized version of avoidance behavior – might be related to a current waking-life issue that includes avoidance on the part of the dreamer. After working with the dream, group members can share their own thoughts and feelings connected to the dream's topics.

Applying Co-Creative Dream Work: The FiveStar Method

Scott Sparrow

McAllen, TX, USA

The co-creative paradigm of dream theory and practice has its origins in the work of Rossi (1972), the phenomenon of lucid dreaming, the adoption of this paradigm into clinical practice by myself and my associates, and the empirical

work of Kahan and others, who have firmly established that dreamers are capable of waking-style metacognition. This workshop briefly reviews the foundations of this paradigm, including the premises that 1) normal (non-lucid) dreaming is an interactive process between a responsive and reflective dream ego and the emergent dream imagery; and 2) the dream outcome is a co-determined or co-created experience. By adopting this paradigm, the dream workers can assist dreamers in discerning the dream ego's responses to the dream content, explore the ways that the imagery changes in response to the dream ego's attitudes/beliefs/choices, and evaluate how these responses influence the overall experience and, by implication, parallel waking relationships. Such an approach is congruent with the competency-based aims of many schools of modern therapy and non-clinical mentoring, and thus may result in a more widespread adoption of dream analysis by psychotherapists and coaches. The presentation will then turn to a systematic approach to co-creative dream work that I have developed over almost 50 years of personal and clinical dream analysis, called the FiveStar Method, which I have written about in several recent peer-reviewed papers. In the presentation, I will 1) cover the history and theory of co-creative dream work, then 2) introduce the FiveStar Method. Finally, I will 3) provide a dreamwork example that will illustrate the effectiveness of the FSM.

Clinical/Dreamwork

Scott Sparrow

McAllen, TX, USA

This interactive presentation covers various ways that dream sharing fits within the larger context of group dynamics--a field that informs us of ways to insure a healthy and productive exploration, regardless of the content of our sharing. We will explore ways to circumvent problems and to deepen the interpersonal bond. This is the third of four modules in the Dreamwork topic for the IASD Foundation Series Courses.

When a group shares dreams, it activates universal dynamics and falls within the larger context of a well-researched and articulated body of knowledge pertaining to the stages of group development. In this workshop, I will introduce a skillset that can be modeled by the leader and shared with the group in the introductory meetings in order to insure a healthy and noninvasive climate of sharing. I will place the current best practices of ethical dream work behavior into a larger context of general group theory that informs us of alternative ways of engaging each other that preserve spontaneity without running the risk of invasive interpretation and projections. I will introduce the concept of “adaptive responses” that stem from early loss and trauma or cultural/family conditioning which manifest on the dream level, as well as in the group interaction. We will then view several challenging group events through the lens of adaptive response, and discuss effective and compassionate ways of intervening in various incidents that commonly arise in groups due to a member's idiosyncratic adaptive function. This framework will facilitate a deepening of interpersonal learning and group intimacy, and provide a compassionate way of understanding repetitive behaviors in group, as well as over the course of one person's dream series.

Dreams of Desire: What Can a Long-Term Dream Journal Teach Us About the Complexities of Sexual Orientation?

Shanee Stepakoff

Farmington, ME, USA

“Sexual Orientation” is a term that comprises a variety of dimensions, including overt sexual behavior, pleasure, “falling in love”, romance, desire, attraction, emotional intimacy, and self-definition. Just as these dimensions are relevant to our waking lives, they also manifest in dreams. In this presentation, a long-term dream journal, maintained over a period of 35 years, served as a means for the dreamer to reflect on the complexities of her sexual orientation and the ways that her self-identification changed over the years between her young adulthood and early old age. A qualitative analysis of the dream journal was conducted, in which dreams with manifest content pertaining to sexual orientation were carefully studied and categorized. The dates of these dreams were compared to events going on in the dreamer’s waking life at that time, a comparison that was made possible by the fact that along with every dream in her journal she also recorded the events and experiences of the day that preceded the dream. Drawing on this rich material, several important questions for dream theories are explored: To what extent do the findings support the “continuity hypothesis”, such that erotic activities or feelings from the dreamer’s waking life were evident in her dreams? To what extent do the results support Jung’s “compensatory hypothesis”, whereby material in the dreams seems to have functioned to compensate for erotic desires that the dreamer was not in touch with in her waking life? To what extent do the analyses support or disconfirm the Freudian view of dreams as a form of wish fulfillment? Also, the presentation includes examples of ways that the various dimensions of sexual orientation are not necessarily congruent in dreams. For example, at various points in the dreamer’s life, the dream journal included dreams that show same-sex erotic desire without necessarily same-sex erotic behavior, a feeling of being “in love with” someone of the opposite sex without necessarily wanting to be sexual with that person, overt sexual behavior that does not necessarily correlate with internal feelings of pleasure, and so forth. These incongruities are considered with regard to the idea that sexual orientation is a complex construct that cannot be reduced to a single dimension. The presenter will also show the participants how to use a word-search method to identify which dreams in a long-term dream journal contain content that is potentially pertinent to the topic of sexual orientation.

Additionally, the presentation will show why and how the dreamer relied on her “close reading” of the relevant dream journal entries to arrive at the conclusion that self-defining as bisexual would be the most honest and authentic way to represent her sexual orientation. Lastly, the presenter will present a matrix for participants to use to better understand the complexities of their sexual desires as they look back through their own long-term dream journals. The target audience is For All, though the presentation will be of greatest interest to people who have an active dream-journaling practice and who wish to learn more about their own sexual desires through a “close reading” of their dreams. This is a “workshop” because an hour is needed: a 30- min slot would not suffice. The reason the method is not that of a tra-

ditional “workshop” but instead leans more toward a “presentation” is that the sensitivity of the topic would make it difficult to invite extensive experiential participation.

Experiential participation is through instructing participants how to use a practical method to explore sexual orientation as it manifests in their dream journals.

Application of Dreamwork

Sophie Verheij

Dordrecht, Nederland

The Goose method is based on the game Goose Board and on the archetypes of C.G. Jung. The Goose Board game is a typical old Netherlands game and metaphor about going your way of life, and uses pictures of the archetype that is present on the Goose Board. “An archetype is similar to a behavioral pattern from biology”. “The contents of primal images can only be understood when they are conscious and therefore filled with the material of the conscious experience.” In order to articulate the processes that are symbolized on the Goose Board in language and use them in a contemporary manner, I have used the journey of the hero. Joseph Campbell has seen a pattern in all myths and stories. The way of the hero shows different stages of a process, virtually all of which return in every myth. These different stages are also visible in our lives, even in every sub-process. Analogous to this line of thought, I have drawn the following parallels: The call for adventure: The bridge, the decision you make. Victory overcoming; the first setback: the inn, Magical helpers: the pit, from where do you draw your strength? Guardians at the threshold: the maze, what do you trust? The initiation: prison, stuck in own convictions. The return: death, letting go and daring and being able to start again.

How dreams can be used in the Goose method: Dreams work compensatively on consciousness. From the dream that I have at night, I formulate a question to get a better view. The dream gives me a basis, sometimes a fragment, but certainly a feeling that I get out of it. I use the method to increase my awareness about the question that I have. This can go into the dream further, but it can rather deal with the situation that I am now in. Just as on the Goose Board, I throw dice to relieve me. Each box is provided with 3 types of questions: a specific question, an invitation and a symbol. You can choose one of these questions. With this question you receive part of the answer to your original question. You roll the dice just as often until you have finished the board. The method can be used as self-examination, in a therapeutic session or for a brainstorming session.

Dream example: My father was always an important driver to keep open the path between the villages Nieuw-Lekkerland and Alblasserdam. Every year he collected a group of men to cut the wood and bushes between these villages. Now a statue has been erected with my father’s name on it. He had also received an image, in the form of an oval stone, with a fire in it and above it a sort of lid. I was allowed to show the image, the stone, to others. Upon returning, the lid was broken in the middle; it was still there but the fire was also more visible. It was remarkable that there was also a ‘Bert and Teuni’ street, ‘Marian and Arie’street, ‘Gerda and Roel’street.

5. Religion/Spiritual/Culture/Arts

Death is Sleep: Instances of a Conceptual Metaphor in Ancient Egypt and Mesopotamia

Lilith Apostel

Berlin, Germany

To make sense of death is among the most difficult challenges for the human mind and a driving force in many religions. The people of ancient Egypt and Mesopotamia confronted this problem by equating death with sleep: beds and other sleeping equipment are a common gravegood, and ritual and literary texts regularly mention a netherworld that coincides with the world of dreams. Yet, we are dealing here not simply with an analogy, in which sleep is equated with death, but with a conceptual metaphor (a concept from cognitive linguistics) that employs characteristics of an experientially well-understood phenomenon, in this case sleep, to form a mental concept of another phenomenon that is more complex or abstract or even, in the case of death, of a nature that is impossible to understand experientially. A holistic, transdisciplinary approach between history, archaeology and the natural sciences shows that, while a belief in life after death itself is not shared by all humans, the underlying mental structures facilitating such beliefs are universal and reach far beyond the obvious similarity between sleep and death, i.e., the outward unresponsiveness of body and mind. Rather, the simulated world that is experienced in dreams is not random but possesses certain characteristics, and Mesopotamian and Egyptian beliefs about the netherworld can be related to a large extent to universal human experience such as the feeling of downward movement while falling asleep. Dreams are therefore a prime example in which to observe the three interlocking dimensions of religion, namely experience, belief and practice, as well as the mental, bodily and social aspects of the topic. Based on my PhD dissertation, the presentation will firstly explain what a conceptual metaphor is and then present archaeological findings of sleeping equipment from graves such as beds or headrests. This is followed by translations of three Sumerian (Death of Gilgameš, Gilgameš and the Netherworld, Gudea of Lagaš's temple hymn) and, lastly, one Egyptian text (letter to the dead on papyrus Nag ed-Deir 3737), all of which date to the end of the third or the beginning of the second millennium BC. In these examples, specific features of dreams become apparent, and their role for ideas about the netherworld will be discussed. States that are characterised by a heightened degree of consciousness such as lucid dreaming, sleep paralysis and flying or falling dreams appear to be of special significance for divinatory techniques and predictions about life after death in ancient Egypt and Mesopotamia.

Drawn into the Dream: Examples of Dream Drawings that Connect to the Deep Unconscious

Walter Berry

Los Angeles, CA, USA

Walter Berry will show a series of drawings done in dream groups and illustrate how making simple drawings of a dream can produce great insight and a connection to the deep unconscious.

On the Fringe of Lucidity and Epistemic Uncertainty

Fariba Bogzaran

Inverness, California, USA

Opening to dreams from the place of not knowing, the unexpected arises. This multimedia performance is an unfolding of several thematic dreams over fifteen years and how creative action brought a new genre in art, inspired art-based research, connected to social issues and brought healing and personal transformation.

Vision and Prophecy in the Dreams of Lucrecia de Leon

Kelly Bulkeley

Portland, Oregon, USA

This presentation explores the visual imagery, religious symbolism, and prophetic warnings contained in the dreams of Lucrecia de Leon, a young woman from 16th century Madrid who was persecuted by the Spanish Inquisition as a traitor and heretic, despite the fact that many of her dream warnings came true. The basis for this presentation is the research I did leading to the publication of *Lucrecia the Dreamer: Prophecy, Cognitive Science, and the Spanish Inquisition* (2018). The presentation will start with introductory comments about the role of visual perception in dreaming. It will consider the powerful influence of visual elements of culture, especially religious art, architecture, and rituals, on people's dream experiences. The second part will provide an overview of the life and dreams of Lucrecia de Leon, an uneducated young woman from a family of modest means who gained a reputation from an early age as an unusually gifted dreamer. Several examples will be given of her dreams, particularly those in which visual elements and themes from her Catholic religious tradition appear. The third part will discuss the visual themes of Lucrecia's dreams in relation to modern theories and research on the visual elements of dreaming. This will include references to Freudian psychoanalysis, Jungian archetypes, the neuroscience of sleep, content analysis, religious studies, and art history. The fourth and final part of the presentation will consider the relevance of Lucrecia's story for contemporary dreamers. Comparisons will be made between the political/religious circumstances that prompted her visionary dreaming, and the political/religious circumstances of present-day Western society. Reasons will be given to support the claim that Lu-

crecia's dreaming abilities are amazing but not unique; they represent a latent capacity for intensified dreaming found in all humans, including people today.

Osama bin Laden's Night Dream Interpretive Practices and Worldview

Iain R. Edgar

Durham, UK

Osama bin Laden, al-Qaeda founder and leader, is known to have related to night dreams – both his own and his followers' – as potential sources of divine revelation and guidance within the Islamic dream theory and related interpretive practices. This paper assembles and analyses his reported dreams and interpretive practices, in so far as they are available for research purposes. First there is the report of his 'annunciation' dream that he had three times when he was 9 years old and that was interpreted by a man of knowledge chosen by his father, Mohammed bin Laden. Amongst others, there were the augury dreams in the video that Osama bin Laden (OBL) released after 9/11 referring to a companion who had had a dream of al-Qaeda fighters playing football against American pilots and in the dream account the al-Qaeda people won; OBL refers to that as a good omen; also in the video OBL refers to his worry that so many fighters are dreaming of planes flying into tall buildings that he is worried about the secret of the attack being revealed. In the trial of Moussawi, the so-called twentieth 9/11 suicide bomber, in the USA, we see Moussawi referring to taking his night dreams of flying planes into tall buildings to OBL for interpretation and OBL interpreting them almost as a Sufi Shaykh might. OBL advises Moussawi to follow his dream. Finally there are the dream(s) in his final discovered handwritten journal from his Abbotabad house in Pakistan where he was killed. I consider the role of night dreams in the mythology of Islamic Jihadist leaders. I also reference recent work by Aimen Dean*, an al-Qaeda dream interpreter, who made allegiance, bayat, to OBL, and who later became a top UK MI6 spy.**'Nine Lives, My Time as MI6's top spy inside al-Qaeda', by Aimen Dean, with Paul Cruikshank and Tim Lister; London: One World, 2018.

The Origin of Creativity: A Sideways Look at Art and Dreams

Willem Fermont

Nuth, New, Nederland

Many people think about the way dreams might influence art. Willem Fermont will talk about how the opposite is also something to consider, how art influences dreams. He will show a number of examples from his own art works that show this.

Dream Play with the Divine

Louis Hagood

New York, NY, USA

Lou Hagood will present his twenty years with dream-incubation questions and responses, asleep and awake, as dream play with the Divine. Historical accounts of dream incubation will be compared to the shamanic technique learned at an IASD annual conference. The technique requires both intention and attention, intention similar to prayer, and attention similar to meditation and trance. All conference attendees are the audience, especially those with spiritual practices.

The Hidden Story of Mythic Dreams: An Animated Movie Trailer

Keith Himebaugh

Grand Haven, MI, USA

Keith Himebaugh will give expression to a backlog of vital images from thousands of potent dreams, finding the hidden story that weaves them all together and presenting them in the format of an animated movie trailer.

Dreaming A Web of Stone: Indigenous Stone Monuments of the Eastern Seaboard of the U.S. and Canada

Curtiss Hoffman and Rolf Cachat-Schilling

Ashland, MA, US

Scattered throughout the woods and fields of the Atlantic seaboard of North America are tens of thousands of stone structures. Both scientific inquiry and Native traditions indicate that these monuments were constructed by indigenous peoples, both before and after European contact. At some sites there are hundreds of individual structures, apparently configured with intention. The placement of these sites is directly related to fault lines, to watershed boundaries, and to solstice and other astronomical alignments which relate to the connections between earth and sky that are central to surviving indigenous belief systems. For indigenous people in eastern North America, stones are the eldest earthly beings, regarded honorifically as Grandparents. Surviving oral/narrative tradition indicates that the sites and clusters form a stone prayer web, which has the function of caretaking our realm, Earth, and caretaking the connections between Earth, Heaven and the Underworld. Reciprocity, connectivity, and equilibrium are central themes of Indigenous ideas of world well-being.

These Stone Beings communicate to indigenous people through "visions" in dream states, either waking or sleeping. In relation to dreams and visions, our waking reality is a mirror, an echo, destined to occur by reflection in the present world. A Native person obtains the aid of spirits and ancestors through self-trial; through visions and dreams we receive empowerment and directive. Sacred stone groupings are visited not only to offer prayer, meditations and ceremo-

nies, but also to obtain answers, directives, and enlightenment. Special places of ceremonial retreat, such as stone structure sites, are places of special spirit fluency, where dreams and visions are sought through fasting and sensory deprivation.

Fools for Christ as Dreamers and Visionaries: The Case of Andrew the Fool of Constantinople

Svitlana Kobets

Stouffville, ON, Canada

The holy fool for Christ's sake is an ascetic who feigns madness in order to cultivate humility, counter pride and edify his ascetic peers and broad public alike. This phenomenon emerged and gained popularity in the IV-VII centuries CE in Byzantium, where it was part and parcel of the monastic movement. After the ban on holy foolishness by an edict of the Trullo Church Council in 692 this phenomenon was outlawed and suppressed for three centuries until in the tenth century it came to prominence again. The Vita of Andrew the Fool of Constantinople was instrumental to this cultural cum religious revival.

In St. Andrew's vita, the well-established image of the holy fool as a saintly renegade undergoes a radical transmutation. All Andrew's processors were ascetics whose decision to undertake the practice of holy foolishness was their own. In sharp contrast to this tradition, Andrew does not choose to be a fool but is called to this role by God. It happens in a momentous dream, after which he re-emerges as a prophet, visionary and otherworldly being altogether. As a holy fool, Andrew pretends to be mad, but his madness and folly—initially the key characteristics of this ascetic practice—become de-emphasized and almost completely overshadowed by the accounts of his otherworldly travels, instances of clairvoyance, visions and miracles, which had never appeared in the narratives about holy fools before. As Andrew's visionary experiences and rapport with the other world come to the forefront, his vita creates a radically new model of the holy fool who is a visionary, mystic, seer and knower of ultimate truths.

In my presentation I address several questions about the transmutation of the holy fool from an ascetic to a visionary.

What were the causes of such a radical re-modeling of holy foolishness in the tenth-century Byzantium? What role did the contemporary visionary and eschatological traditions play in this development? And what were the consequences of this change for the subsequent development of the holy fool's paradigm? My paper addresses these questions as it explores the visionary narratives, which appear in the Vita of St. Andrew the Fool of Constantinople.

This paper is a part of my ongoing research on the role of the visionary dimension in the cultural history of holy foolishness, and as such will be included in my upcoming monograph "Paradigms of Holy Folly."

Demonic Dreaming

Yong Lu

Warsaw, Poland

The intriguing study of dreams related to mystical symbols has attracted such conventional fields as comparative religions, philosophies, and psychoanalyses. In this proposal, first, the author briefly presents, from the perspectives of Freud and Jung, the importance of energetic desire (libido), symbolism, and unconsciousness in interpreting dreams. Then, the author introduces the scholarly research on demonic dreams, which heretofore has emerged merely as a few case studies including a recently published work by the author. Demonic symbols in dreaming have been so far theoretically interpreted as resulting from dreamers' purely physical reactions (e.g., feverish delirium, pressure of bed-clothes), belief in "devil spirits", daily residue, fulfilment of will, inferiority complex, or Chinese culture-related factors. Still, very little progress has been made in establishing an explanation with regard to demonic dreaming for its cause--that is, the unknown of dream life in which the devil or demonic plays a role. The proposal appeals for conducting empirical, statistically analyzed research on a large sample of demonic dreams in relation to what psychodynamic issues they may represent for the dreamers. The dreamers are ultimately responsible for the personal meaning of their dreams.

Social Dream-Drawing: Supporting Those Coping with Big Life Changes

Rose Redding Mersky

Solingen, Germany

Social Dream Drawing (SDD) is a facilitated group methodology, in which participants going through major personal and professional transitions offer free associations and amplifications to the drawings of one another's dreams. Collective reflection following each associative experience leads to important individual learning and insight, particularly regarding current preoccupations and challenges. A theme for each workshop, which relates to a question or a problem group members are facing, is defined before they meet for the first time. Examples include: "What do I risk in my work?" and "Who am I as researcher?". This methodology was extensively developed, trialed and evaluated by the presenter, using Psycho-Social research methods (Holloway & Jefferson; Clark & Hoggett; Mason) and is based on socioanalytic theories (Bion; Lawrence; Bain). The presenter worked with 22 participants in five different groups in four different countries over a period of seven years and was awarded her Ph.D. from the Centre for Psycho-Social Studies at the University of West England in Bristol for this work. SDD is based on the theory that dreaming is a form of thinking (Lawrence; Bollas) and that dreams are creative communications from the unconscious (Grotstein) that, in a supportive and creative group atmosphere, can be integrated and used for further insight and learning. SDD makes use of the visual representations of dreams (Hau, Davis), which access more of the primitive dream content. The drawings themselves function as an important third object (Benjamin; Winnicott) which links

group members together in the work. These drawings serve over time as significant reminders of a deep process of internal change for each participant. The design of the workshop and the way the facilitator works with the group are grounded in Socio-Technical theory (Emery & Trist), which holds that both social issues and technical issues (such as reliable time boundaries and clear tasks) are equally important in facilitating successful group experiences. In SDD, the associative experience involves returning to primitive dream material and often leads to a regressive group experience, which requires a containing facilitation style. The reflective session that follows has a different task and is facilitated in the form of an interactive discussion. Technical issues, such as beginning and ending on time, using the same process to explore each dream drawing, and clarity about the task of each part of the workshop are maintained. Participants are often not familiar with the task of free association and amplification, which is explained and modeled by the facilitator. Dreams and drawings are not analyzed or interpreted. Rather, they serve as the springboard for the associations to lead to reflective thinking. SDD has many possibilities as a personal guidance and professional development tool. This method would be of interest to the following professionals: human resource professionals, academics, business school leaders, grief and trauma counselors, action researchers, social workers, supervisors, university deans, career transition and outplacement counseling professionals, facilitators of support groups, coaches, organisational consultants and group supervisors.

The workshop will be divided into three sections: Section 1: Exact steps in the conduct of the workshop. How to organize and facilitate one; Section 2: Brief summary of underlying theory, including those cited above; Section 3: Three examples of participants' learnings and drawings, from three different countries. This presentation is geared toward anyone interested in the creative potential of drawings of dreams, either as a complement to verbal dream telling (Hau) or as a means to facilitate major transitions with clients, students, supervisees, colleagues or others.

Overview and the Institution of the Christian Church

Geoff Nelson

Whittier, CA, USA

This presentation is part of a panel on bringing dream work into institutions. This panel grew out of a workshop done at the 2018 IASD conference in Arizona. That workshop had one goal, among others, of possibly putting together a panel on the same topic for future conferences. IASD members are well aware of the benefits of doing dream work, as research tools, creativity prompters, group cohesion tools, etc. Yet we are also aware that it may be a hard sell to bring actual dream work, not just lecturing about dreams into institutional settings. My experience is with religious institutions, but I've encountered similar experiences with people who work in academic or research institutions. I will list some of the Biblical references to dreams, both negative and positive. I will give examples of my attempts to bring dream work into Christian churches. I've had several success stories but also some disappointments. These successes and disap-

pointments will be considered briefly, to see what wisdom might be passed on from them. Though my experience is with Christian churches in particular I'll explore what might be modified to fit into another institution. How might sharing experiences and techniques within one institution or discipline enrich the work of others in their own institutions and disciplines? What are some of the cultural issues that are attached, both consciously and unconsciously, to the institutions that we are part of? How does dream work both challenge and assist those cultural issues? How are institutions different from each other? All of this will be approached specifically with dream work as the focus and, in my part of the panel, with references to my experiences with dreams and dream work in churches looking at what might be applicable in other institutions.

An Inquiry into Personal Dream Experience: Using Dreams as Guidance to Create Art

Judy Pascoe

Cheltenham, UK

This presentation follows on from a research MA (2012-2014) undertaken in Transpersonal Psychotherapy completed at the Centre for Counselling and Psychotherapy Education, London. This update provides further insight into an art practice that was discovered during that research that enabled guidance from dreams to assist in creating art works. In the initial qualitative study, methodologies of Organic Inquiry (Clements, 1998, 2004, 2011), Art-based Inquiry (McNiff, 1998, 2008, 2013) and Heuristic Inquiry (Moustakas, 1994) were applied to study the transformational potential of drawing dream images. There were ten key findings from the original study, linking the research to psycho-spiritual development. Theories that underpinned the findings included: Alchemical theory, Edinger (1985) and Hamilton (2014); Dialoguing with dreams in existential art therapy, Moon (2011). The collective unconscious revisited, Hunt (2012); Dreams and the mandala, Jung (1968); The phenomenological-existential approach; the dreamer remains in control of the meaning of the dream, Moon (2011). Further development of the research is based on the continuing guidance offered by dreams and their contribution to personal psycho-spiritual development and the refinement of the images. The transformational experience of the research will be presented, along with strengths and weaknesses of such a study.

Dreaming Cosmic Rebirth: Trees as Symbols of Regeneration in Ancient and Modern Otherworld Visions

Stephen Potthoff

Wilmington, OH, USA

This presentation will examine a selection of ancient and modern otherworld visions featuring sacred trees as symbols of hope, healing, compassion and regeneration. As part of the extraordinary and ongoing emergence of life on planet earth, human beings have spent the majority of their evolu-

tionary path in intimate relationship with trees. That trees are central to human life, is reflected in the archetype of the tree of life, which features prominently in the biblical Eden narrative and many other creation stories. In the dreams and visions of prophets and shamans throughout human history, sacred trees figure prominently as embodiments of the life force, permeating and sustaining all living things and the cosmos as a whole. This presentation will highlight the ancient meaning of sacred trees in visionary accounts from the Jewish prophet Ezekiel, the Jewish apocalyptic Enoch literature, the New Testament Book of Revelation, the Lakota shaman Black Elk, contemporary near-death visionary Betty Eadie, and shamanic visionary accounts from anthropologist Michael Harner's shamanic workshops.

How to Turn your Dream into a Tragedy

Arnoud Sisselaar

Amsterdam, Netherlands

An attempt is made to turn two modern dreams – a dream of a former colleague of the speaker and a dream of himself – into literature according to ancient Greek guidelines for an intended audience, and thus to contribute to a modern understanding of dreams. Starting point for the presentation is Joachim Latacz's assumption that the Ancient Greeks knew more about dreams than what has been rediscovered since Goethe and Freud, and that it is above all in Greek literary works – epic, early lyric and tragedy – that the essence and operation of dreams is best transmitted. To transcend the horizon of perception, a dream must be replaced by a dream description, and in a literary text a dream appears only in the context in which it is told. This dependency on context is a main principle for dream representation in antiquity. In order to understand how a Greek literary work can be thought to have added a new dimension to an ancient understanding of dreams, Christine Walde has developed an approach which pays attention to all the scenes in a literary work in which the occurrence, narration or explanation of a dream take place, relating these scenes to aspects of a real dream such as its narration determined by medium and by context, and by distinguishing between the dream 'I', the dream narrator, and the public inside and outside the situation of communication.

In the summer of 2018, I employed the dream of a colleague named Richard for my presentation during a seminar about scent in dreams. This very vivid dream must have impressed the dreamer also because of its repetitive character: it reappeared during the dreamer's life with only minor changes. This fact, in combination with Richard's attitude toward the dream – he did not consider dreams to have a relation to daily life – made me think of Iphigeneia's dream in 'Iphigenia in Tauris' by Euripides. Iphigeneia concludes from her dream that her brother is dead, but Orestes appears and now it seems she will dedicate her brother as a sacrifice. Just in time, brother and sister recognize each other and Iphigeneia will dismiss the dream as untrue. Iphigeneia's dream is a mirror text: the embedded text is a dream, the ambiguity of which is used strategically. The public will understand how it predicts the events, but will the personage understand it? I think it could be interesting to give this dream a real audience and to make literature of it according to ancient literary guidelines, to connect it with Iphigeneia's

and other ancient dreams, and add a dream of myself which I have always understood to represent a mirror text as well. These stories must depart from the description of the dream and a context in which the dream is told, explore the relation between dream and dreamer and thus provide a characterisation of the dreamer. The dream – using further literary tools as distinguished by Christine Walde – should develop blueprints for action by the dreamer, and the dreamer's social network should become visible when the dream leaves his personal atmosphere, as well as the dream's character as a text or history which can be manipulated. Reflection about the dream, when the dreamer tries to understand his dream or submits it for interpretation by someone else, could become reflection about the status of man and starting point of human communication.

Two Giant Dreamers in Japan: Myoe and Kumagusu

Misa Tsuruta

Tokyo, Japan

Two dreamers, Myoe Shonin and Kumagusu Minakata, are obviously representatives of dreamers in Japanese history. While their times and walks of life were different, they had at least a few things in common: they both kept dream journals for a long time; both of them were influenced by the Kegon School of Buddhism; and both of them seemed to believe in parapsychological phenomena. The intention of this presentation is to compare and contrast these two dreamers in the context of Japanese culture. It is not an easy task because each of them is a rather unique, influential figure in Japanese history. Myoe was a "successful" Buddhist priest who was very tactful and experienced in meditation. It was known that he disappeared in the mountain behind his temple, Kozan-ji Temple, for a few days, only to come back to the temple to feed himself with some food, and disappeared again. He often disappointed his visitors by his absence. He had visions of Buddha during waking and in dreams. He dreamed of travelling to the land of Buddhism, India, but a couple of dreams stopped him from embarking. On the other hand, Kumagusu was one of the first Japanese individuals who studied in Western countries after Japan's opening of the country, the Meiji Restoration. But in his case, he was unique because he was mostly self-taught. The coincidence/fate was so powerful that while in London he befriended a Buddhist priest, Horyu Dogi, who later became the head of Kozan-ji Temple and added to Kumagusu's expertise in the Kegon School. He was a prolific scholar, though he never belonged to any academic institutions. He published numerous articles in the UK and in Japan. After he came back from England, he secluded himself in the forest of Nachi for several years, but eventually he came out, got married, and joined the village life. Perhaps the two dreamers also shared a love of nature. Obviously Myoe spent a lot of time in the mountains during his youth and after he became a priest. Kumagusu was never satisfied by "dead knowledge" in books and went out in the fields to find numerous botanical and other specimens. As many IASD members may do, I believe in Mother Nature's power to promote dreaming. So perhaps their power of dreaming was fortified by the nature in which they immersed themselves.

Art and the Multidimensional Conversation with the Deep Inner Self

Kim Vergil

Allschwil, Switzerland

For Kim Vergil, dreaming, life and art are multidimensional conversations with the deepest inner self, which are digested then reflected back into the universe. She will show examples of her work and talk about how as an artist she puts her work back out there as a beginning to a new conversation and perspective of our collective internal dreams and dreaming.

Hilma af Klint: 20th-Century Artist and 21st-Century Visionary

Bernard Welt

Takoma Park, MD, USA

One of the most exciting new discoveries in international art is a painter who was born in 1862 and completed her most significant body of work by 1915. Hilma af Klint (1862-1944), who was one of the first women artists to complete her formal training at the Swedish Royal Academy of Art, undertook a series of extraordinary works, blending geometric shapes, biomorphic forms, numbers, signs, and symbols, well before other European artists such as Wassily Kandinsky, Piet Mondrian, and Kazimir Malevich became celebrated for their innovations in non-representational abstraction. Unbeknownst to them all, af Klint shared with these artists a new, transcendentalist view that rejected the traditional duty of art to faithfully reproduce reality as perceived by the senses, in favor of a mission to communicate a “higher” reality, ultimately perceived neither by the senses, nor the mind, nor the heart, but as all of them styled it, by the spirit. Af Klint derived the inspiration for her work from visions, dreams, automatic drawing, and mediumistic séances, generally undertaken with a group of Swedish women artists known as “The Five,” and under the influences of Rosicrucianism, the Theosophical writings of Mme. Helena Blavatsky, and later, Rudolf Steiner. From 1906-1915, she dedicated herself to the production of a series entitled “The Paintings for the Temple,” under the direction of her spiritual guides—even af Klint herself did not know just what “the Temple” referred to. By the terms of her will, the artist’s work was not publicly exhibited for forty years after her death. Her guides had suggested that the world was not yet ready for them—and they may well have been right. After rediscovery by feminist scholarship, and a blockbuster exhibition at the Guggenheim Museum, “The Paintings for the Temple” are now widely considered one of the most remarkable bodies of work in 20th-century art, and Hilma af Klint has been anointed a pioneering genius of modernism. Each succeeding generation of artists defines itself according to what and whom it chooses from the past to honor and emulate, and there is no question that Hilma af Klint has become the patron saint of a new school of 21st-century artists.

This presentation will provide discussion of Hilma af Klint’s own writings on inspiration, imagination, and visionary art, with comparison to other early Modernist works that also developed a transcendentalist aesthetic, such as Kandin-

sky’s “Concerning the Spiritual in Art,” and will be profusely illustrated with images from af Klint’s captivating artwork, along with a few contemporary artists who acknowledge a debt to her. Many in the audience will be aware of how Sigmund Freud’s theory of dreams influenced modern art, particularly via Surrealism. Perhaps less known is the highly significant influence of occultist and spiritualist conceptions of dreams and visions. This presentation will attempt to provide some ideas and examples to broaden our awareness and knowledge of these key sources of the avant-garde in Modernism.

Sources

- Asfour, Nana. “The First Abstract Painter Was a Woman.” *The Paris Review*. Oct 12 2018. Retrieved from <https://www.theparisreview.org/blog/2018/10/12/the-first-abstract-painter-was-a-woman>
- Bashkoff, T., ed., et al., *Hilma Af Klint* (New York: Solomon R. Guggenheim Museum, 2018)
- Esplund, Lance. “Hilma af Klint: Paintings for the Future’ Review” *Modernism’s Missing Link?* *The Wall Street Journal*. Oct 13 2018. Retrieved from <https://www.wsj.com/articles/hilma-af-klint-paintings-for-the-future-review-modernisms>
- Schjeldahl, Peter. “Hilma af Klint’s Visionary Paintings.” Oct 22 2018. Retrieved from <https://www.newyorker.com/magazine/2018/10/22/hilma-af-klints-visionary-paintings>
- Wolkoff, Julia. “How the Swedish Mystic Hilma af Klint Invented Abstract Art.” *Artsy.net* Oct 12 2018. Retrieved from <https://www.artsy.net/article/artsy-editorial-swedish-mystic-hilma-af-klint-invented-abstract-art>

The Hidden History of An Experiment with Time

Bernard Welt

Takoma Park, MD, USA

Barring unforeseeable developments in technology, our nightly dream journeys are as close as we are likely come to time travel. The vivid recollection of the settings, personalities, and events of childhood, along with the capacity of dreams to transport us to the historical past, are defining features of the mystery of dreams. But some thinkers have seriously considered whether the dream state actually unmoors us in time in a way that, strange as it may seem, exposes our common-sense view of time as an illusion, and hints at the nearly unimaginable reality postulated by post-Newtonian physics. The very idea seems to bring science and imaginative fiction into a circle of mutual influence, perhaps even a conceptual loop, making it difficult to firmly distinguish one from the other. J. W. Dunne’s *An Experiment with Time* (1926) first proposed that in dreams, as our everyday concessions to the practical demands of socially-defined time fade away, we perceive the reality of time as a kind of eternal moment, blending past, present, and future. Hence the appearance in dreams—which Dunne claimed to demonstrate empirically—of future events. This might seem like classic British eccentricity, were it not for the fact that Dunne was an established scientist, reputed to be one of the few persons in Great Britain who could explain Albert Einstein’s theory of relativity.

This presentation describes and explains Dunne’s famous experiment, then examines its influence on literary writers, notably the innovative drama of J. B. Priestley, recently undergoing a revival precisely because of its mysterious view of time; and particularly on the renowned novelist Vladimir Nabokov, who was delighted to take up Dunne’s view of dreams due to his lifelong antipathy to Freud and psycho-

analysis. (Nabokov concluded that literary fiction had more to tell us about the mind than Freud did.) We also outline the effects of Einstein's theories upon modern concepts of time, characterizing the great physicist's discoveries as works of imaginative fiction, considering their foundation in "thought experiments" that amount to a species of short story. The famous debate between Einstein and Henri Bergson, respectively arguing for physical and phenomenological primary concepts of time, is discussed as a context for the exploration of time and memory in modernist writers such as Marcel Proust and Virginia Woolf, and in the philosopher Gaston Bachelard, with his emphasis upon the reality of imaginative experience. We conclude by discussing how the bold exploration of these two viewpoints on time revolutionizes both science and art in our era—through the rapid evolution of deeply counter-intuitive models put forth by physicists and philosophers such as Stephen Hawking, Carlo Rovelli, and Julian Barbour; and the complex play with dreams, alternative timelines, and imaginative experience, in experimental fiction, notably Alan Lightman's *Einstein's Dreams*, and even such popular oneiric films as *Inception* and *Donnie Darko*. Novelists and filmmakers seem increasingly to draw their inspiration from speculative physics, while physicists appear more and more to acknowledge that they are challenging the border between science and science fiction. It may be only in imagination that we can grasp the nature of reality.

6. Education/Other Topics

Children's Divine Dreaming

Kate Adams

Lincoln, Lincolnshire, United Kingdom

The connection between dreams and religious and spiritual beliefs dates back to ancient civilisations. Whilst the phenomenon is often neglected in contemporary economically advanced societies, both adults and children report experiencing them. The literature on children's divine dreams is relatively sparse, but studies show that some - from religious and non-religious backgrounds alike - occasionally experience such a dream which has significance for them. The dreams share themes and characteristics found in the teachings of the Abrahamic religions as well as dream content studies and some align with Jung's concept of 'big dreams'. For example, themes include precognition and reassurance. The presentation shows how children find their own meaning in these dreams, identifying messages which can appear symbolically or literally through auditory means, demonstrating how this long recognised type of dream still has relevance for many young people.

Personas, Shadows, and Self: Dreams as Integration for Middle School Students

Jaclyn Brown

Springfield, MO, USA

Middle school is a critical juncture in life; unfortunately, it can be the most trying emotionally. This presentation will look at how middle school students used intentional dream study in an 9-week elective course for navigating the rough roads of adolescence. Substantial research indicates links between middle school success and adult success. The stakes are much higher in middle school than in high school, especially in environments involved students from marginalized or oppressed groups, or who live in poverty. Using dreams as a mindfulness technique to tap into personal selfhood can give students a sense of control over their lives, set goals, and achieve higher forms of both personal and academic success. Part 1: Description of middle school--age ranges, neurology, hormones, social climate, etc. Part 2: Introduction to students of Reed Middle School taking the elective course. Part 3: Practices used in class to foster deeper understanding of the self and mindfulness. Part 4: Responses from students throughout the course (beginning, mid, end, etc) and outcomes beyond the class.

Dreaming a Peaceful World into Being

Jean Campbell

Portsmouth, VA, USA

According to the United Nations High Commission on Refugees, the number of refugees in the world has climbed to more than 52 million, with 49 percent of these being children. In the United States, widespread school shootings have created "under the desk" drills and talk of arming teachers. From Syria to Somalia, from Parkland to Sandy Hook, young people are being faced with increasing levels of violence and trauma. How can we teach them to use dreams to create a more peaceful world? This presentation, providing examples from a dream program created by The World Dreams Peace Bridge for children in Iraq, outlines some suggestions.

Dreams as a Resource for Teachers, Spiritual Directors, Counselors, and Creatives

Laurel Clark

Maryland Heights, MO, USA

Laurel Clark offers dream education to non-credit adult education programs, religious institutions, social workers, public schools, and organizations. She will share her experience, describing how she set up programs for an international conference of spiritual directors (Spiritual Directors International) a state conference for social workers (National Association of Social Workers in Missouri), an elementary school, offering a program for first through fifth graders, and even a sermon on dreams for a local church. She also shares other groups and organizations that have been receptive to

lectures, classes, and workshops on dreams. For example, she has done workshops on dream incubation for inventors, artists, and writers. She will offer some general guidelines for finding institutions that offer conferences, educational venues for courses and programs, preparing a proposal, and describing the benefits to those institutions.

NDEs and Dreaming

Art Funkhouser

Bern, Switzerland

There is a growing number of near death experiences (NDEs) being reported in numerous books, in Youtube videos, on other Internet websites, and also on Facebook. The personalities of those who have had them are often changed, sometimes dramatically. At this point, though, little is known about how an NDE affects a person's dreaming. In an initial, exploratory attempt to address this, a 10 question anonymous survey questionnaire was put on-line (using SurveyMonkey) asking about some characteristics of dreaming (frequency, tone, etc.) and a number of individuals who say they have had NDEs have kindly taken the time to answer them (Note: dream content was not asked for). In this talk, the results of this pilot project will be presented. It is hoped that this will stimulate interest in dreams and dreaming both within the NDE community as well as interest in NDEs among dreamers.

The Impact of Digital Technology on Children's Dreams

Jayne Gackenbach

Edmonton, Alberta, Canada

In the presentation, Jayne Gackenbach will discuss how children's screen time may affect their nighttime dreams. In the 1930s the average American child was exposed to approximately 10 hours of mass media per week. With the proliferation of technology in the 21st century, the average American child is now exposed to 10 hours and 45 minutes of mass media per day. Topics that will be touched upon in this presentation is the effects of video game play on aggression, social media usage effects on narcissism, and cognitive effects both positive and negative. What is the social pressure to share screen time? How do experiences such as cyberbullying and sexting affect youngsters. Specific games like Minecraft will also be discussed in terms of how it might set up a new generation for creative expectations of media use. When violence shows up in a dream is it a function of gaming? If so, is it possibly protective of the fearful elements in the dream? These issues are far ranging in today's digital society so that protecting children is increasingly challenging. The fairly easy association of my child saw a scary movie and had a nightmare is no longer so straightforward as the complexities of digital realities intertwine with, children's building sense of what is real.

Nightmare Empowerment for Young Lucid Dream Magicians

Clare Johnson

Marbach, Germany

When we know that we are dreaming, we can engage consciously with the dream world, recognising it as a malleable co-creation, responsive to our thoughts, emotions and intentions. We also know that this is a world from which we will wake up safely. Simply becoming lucid in a nightmare can cause all fear to vanish and in response to the dreamer's new mindset, the dreamscape may spontaneously transform into something beautiful or healing. Lucid dreaming can empower children of all ages to have a happier, more fulfilling dream life. In a lucid dream, children can do dream-work while in the dream. This puts them in an extremely powerful position for transformation, particularly in the area of recurring nightmares. How accessible is lucid dreaming to children between the ages of two and eighteen? The answer appears to be: "Very". A 1998 study by Lapina, Lysenko and Burikov found 80-90% rates of lucid dream frequency in 15- to-18-year olds. One 2006 study by Qinmei, Qinggong, & Jie shows that most four-to-six-year-olds believe that there may be a way of controlling the action in their dreams, while knowing that this is a dream. Teaching a sample of thirteen 10 to 12-year olds lucid dream induction techniques such as reality checks, re-dreaming, and MILD (Mnemonic Induction of Lucid Dreams) over a six week period resulted in 92% of the children having at least one lucid dream. Such studies indicate that lucid dreaming is a learnable skill for the majority of children. Lucid dreaming puts children in a strong position to work on their dreams and nightmares while they are dreaming. If children wish to guide the lucid dream, there are many possibilities for doing so in ways which encourage self-belief, creative thinking and problem-solving skills. These skills can carry over into the child's daily life, empowering him or her both in the dream world and the waking world. This presentation explores the practicalities of working with lucid dreaming to help young children to resolve nightmares and shares the author's L.O.V.E nightmare empowerment technique.

References

- Garfield, Patricia, *Creative Dreaming*, (New York: Ballantine Books, [1976], 1988).
- Johnson, Clare & Jean Campbell, *Sleep Monsters & Superheroes: Empowering Children through Lucid Dreaming*, (CA: Praeger, 2016)
- Johnson, Clare R. *Llewellyn's Complete Book of Lucid Dreaming: A Comprehensive Guide to Promote Creativity, Overcome Sleep Disturbances & Enhance Health and Wellness*. Woodbury, MN: Llewellyn Worldwide, 2017.
- Johnson, Clare, *Dream Therapy: Dream your way to health and happiness*. London: Orion, 2017
- Johnson, Clare R. *Mindful Dreaming: Harness the Power of Lucid Dreaming for Happiness, Health, and Positive Change*. San Francisco, CA: Conari Press, 2018.
- Lapina, N., V. Lysenko, & A. Burikov, "Age-dependent dreaming: characteristics of secondary school pupils." *Sleep Supplement*, 21 (1998): 287.
- Qinmei, X., L. Qinggong, & L. Jie, "4-6 Year old Children's Understanding of the Origins and Controllability of Dreams," *Acta Psychologica Sinica*, 38(1), (2006): 70-78.
- Tholey, Paul & Kaleb Utecht, *Schöpferisch Träumen: Der Klartraum als Lebenshilfe*, (Frankfurt, Klotz [1995] 2008).

Mystical Objects in Dreamtime: Hike and Twilight/ Gloaming Boomerang Throw

David Low

Flourtown, PA, USA

After the group assembles, I will lecture about boomerangs, either before we go out to the location, or during the ride. Then we'll do a moment of silence in which we each contemplate something we would like back--something we would like to have "return" to our lives. I will then review safety measures, demonstrate some throws, provide instruction, and divide the group up into groups of three or four people each and send them to different areas. I'll float between the groups and provide pointers during the throwing period. Finally, we'll think again and perhaps discuss the specific things we'd like to have back in our lives, and request a dream concerning it.

Visions from the Dream World

Georjean Machulis

Tallahassee, FL, USA

Georjean Machulis personally introduces and presents two videos: "Visions from the Dream World" and "Premonitions, Prophecy, and Visitations", a myriad collection of illustrated dreams with verbal descriptions. Followed by an open dialog with participants.

The Real Fountain of Youth

Peter Maich and Milo Alexander-Travers

Westport, Buller, New Zealand

Creator, Milo Alexander-Travers, based on experiences of Peter Maich, presents a short film shot in Malaga, Spain. It contains impressions and thoughts on lucid dreaming based on the experiences of Peter Maich, an artsy look at lucid dreaming aiming to take the viewer into the dream world. It is based on experience and aims to be entertaining and informative .

The film is 6 minutes long, and the presentation will run in the approximate timeline below: An Introduction from Maich and Milo of approx. 8 minutes; 6 minutes of film; 5 minutes of Q&A on the concepts in the film, dream induction, reality checking, blending of both worlds; 3 minutes to present one deep dream based on the trip to Malaga and around Spain prior to the film being made; Possible Q&A on this 5 minutes. Total presentation around 30 minutes, depending on interest and questions on the film, the dream that inspired part of the film and lucid dream induction.

The film captures some thoughts on the blending of the dream world and waking reality; the process of breathing to relax into the lucid state for a Wake Induced Lucid Dream (WILD); some reality checking that leads to Dream Induced Lucid Dreams (DILD). It was filmed while walking around Malaga in a way that appears at times to be in the dream-state. I offer some thoughts on how dreams have affected and enhanced my life; and some simple applications for dreaming and lucid dreaming.

Dragons, Angels, and Developmental Rites of Pas- sage in Children's Dreams

Angel Morgan

Ashland, OR, USA

This presentation will lead professionals working with children, and teens, on an informative adventure into the language of young people's dreams. The universal ways in which dreams developmentally communicate with children and teens, and the important value of teaching them to participate with their dreams will be described. Cross-cultural examples of children's dreams will help demonstrate successful models of this dynamic. Why common adult reactions to children's dream sharing can be problematic will be explained. Adults will be offered appropriate responses to children's dream sharing that helps children of all ages feel increased safety, trust, and a sense of well-being. Dragons in this presentation represent important lessons that children, teens, and adults can learn from their dreams: to face fears, integrate animal instincts, tame anti-social behavior, and feel empowered to soar to great heights. Angels appear in many forms in young people's dreams, often to integrate this sequence: spiritual guidance, parental guidance, and teacher guidance. Rites of passage dreams that children and teens experience, and how these kinds of dreams make them feel will be outlined so parents and caregivers can recognize and honor them when they happen. For example, adults will be given tools to help children develop capacities for lucid dreaming. Specific examples of children and teens' dreams, and the impact these dreams have had on the children and teens will be shared to help demonstrate mirrored developmental opportunities with dreaming. The ways young people of various ages and stages can learn by working and playing with dreams, and the wider social impact of adults working thoughtfully with children's dreams will be discussed. Specific methods and techniques for creatively working and playing with dreams will be included that the presenter has taught to children, teens, parents, teachers, and caregivers of children for over 20 years.

Interviews with Young Students about Their Dreams

Martha Taylor

Floyd, VA, USA

"Children have their own creativity and imagination that brings new solutions to problems. As students create their own identity with which to better our world, listening to them and their dreams can bring us insights in understanding our larger world, one they will play a large role in. What they dream holds the future; perhaps it would be wise for us to listen to them."

In a series of classes presented in the closing month of the 2013 school year, the students learned how to remember dreams, told dreams in class to each other, wrote dream stories, acted out their dreams in dramas that they created with costumes provided by the teacher; following the drama they were asked what acting it out taught them that they did not know before. They also wrote stories about their dreams. The most excitement came in acting out their

dreams and sharing them with their classmates. As a follow-up from this class, I will present interviews with several of these students 5 years later about their dreams and how they have changed.

The interview will open with a dream story: one read in the first class, or one that may be more applicable to their age group. Since dreams and stories are drawn from the same cloth, I attempt to get the kids telling stories. Then I use dream stories to provide compassion, growth and assistance to them as teens. The interviews are one on one or one on two for the comfort of students. The students are asked a series of questions to learn what they currently feel about their dreams, such as: Would they like someone to talk to about their dreams? What was most memorable from their previous class? Do they remember the dream drama and images of superheroes as protectors from the original class as memorable experiences from the original series? I ask them to share a current dream and work with it: Tell the story of the dream; share an image from it, or picture it, talk about it; imagine it as a film: who are the actors, where does the dream take place, what is unusual about this dream place? What is the setting: scary or calm or what, can you describe it? What would you like to change in your dream story? Why did you dream this, is there a message for you? Questions may be adapted to the responses received. Do they tell their dreams to anyone? Would they like someone to talk to about their dreams? Do they remember or keep the image of a dream protector made for them for their bed at the conclusion of the previous class. At the end of the interview, I will offer some education to encourage the teens in their development. Young teens usually feel ready and willing to share their dreams with other peers they feel safe with, and enjoy exploring their dream content creatively as they mature. I encourage re-dreaming, dream art, writing, poetry, and improv theater and also dream journaling. By age 14 they can join dream circles and do creative writing from dreams or nightmares. I ask how they feel after acting out the dream. It is helpful to realize that after puberty, love interests and sexual dreams happen, due to attractions. It helps to share these dreams; exploring these topics helps them form their own identities. Might it be useful to suggest joining a dream circle to develop a common dream vocabulary and open-mindedness to the experience of others? (adapted from Angel Morgan)

7. PSI Dreaming

The Song of Songs at the Improbable Temple of Magic

Tony Hawkins

London, UK

The 'paranormal' in dreams and creativity is evidence of natural super intelligence and its possible necessary and benign influence on the development of artificial super intelligence. I give examples from my experience including the strange and beautiful events around Kings Cross Station. Imaginative lubrication: The presentation involves examples of 'precognition' in my own creative writing and dreams. I

give examples in my writing leading up to the disaster at Aberfan in 1966 and the Six-Day War of 1967. After this, I stopped writing violence into my stories. A continuing evolution has gone on throughout my life as a result of this type of experience. The Aberfan related story began when a voice whispered the opening sentence amidst the hissing steam trains of King's Cross Station. I now move on to dreams. My 1968 God dream entailed, among so much else that I have drawn from it over the years, a precognition of the Moon landing the following year, particularly illustrating the spirit of the occasion from Neil Armstrong's words to our abandonment of the Lunar Program. In 2008 I joined IASD. On 15th July of 2009 I dreamt of Dave Russell, a poet singer I had not seen for 40 years, and posted it to my IASD group. Dave was going to sing my song. Janet of the group, who lived in Spain, was coming to London. We met for a day and parted at King's Cross. I realised the man on the escalator in front of me was Dave. Janet witnessed our encounter. This would have been on or about the 40th anniversary of the Moon landing, a fact which I have only just realised (21.12.18). In 2016, the night before Donald Trump was elected, I dreamt of Russian cosmonauts, man and woman, who had Trump's hair colour. He was dramatically bigger than her, which in hindsight suggested he would win. The Russian connection was unknown at the time. Contemporary science says that incidents like this have no meaningful connection except in my head.

Psi dreams and creative synchronicities have trained me in natural super intelligence ('God', 'Spirit', 'the Unconscious') throughout fifty years. The drive to develop artificial super intelligence, currently based on conscious reason and science, needs to embrace and apply natural super intelligence if human beings are to thrive.

I wind up with the story of King's Cross, once notorious for crime and prostitution, now being the jumping off point for Hogwarts and seeing how the whole area has been regenerated; Google and the British Library and the gasholders turned into luxury flats and St. Martins Art College, which took over the old Granary, and has 5000 students. I could have a slide shows of this or borrow one from them. This following one expresses the spirit of transformation. <http://www.youtube.com/watch?v=UUX--twV9fl> My theme is global optimism.

New Evidence for Precognitive Dreams

Paul Kalas

Berkeley, CA, USA

The characteristics of déjà vu (previously seen) and déjà rêvé (previously dreamed) reports have been repeatedly studied for over a century in the clinical research literature as well as in several authoritative books. Epilepsy is causally associated with these phenomena, yet many people report these experiences in the absence of epilepsy. There are over a dozen possible explanations that are largely hypothetical or speculative, one of which posits precognition during dreaming. The advantage of this hypothesis compared to others is that it is testable, a quality fundamental to science. The test requires a comparison between a dream report and a future event with metrics to classify the match (e.g., the true positive rate). The difficulty is that dream reports are based on both short and long- term memories that have

the pervasive problems of decay, interference, and flawed semantic encoding. Moreover, information time travel has not been experimentally observed (or recognized) in other disciplines such as physics. Thus, to date, precognition through dreaming has not been rigorously tested and remains speculative.

Here we report 332 *déjà rêvé* experiences by the author who is neither epileptic nor diagnosed with other physical or psychological pathologies. One of these experiences is recorded at two epochs as a dream report in 1995 and a subsequent astronomical discovery in 2004. We show that the discovery was novel to human knowledge and could not have been anticipated at the dream epoch. We review skeptical approaches such as cryptomnesia, pareidolia, confirmation bias, and chance, concluding that these explanations are highly unlikely. The most likely explanation is that the astronomical discovery along with the other 331 experiences are sufficient empirical evidence for a mechanism that episodically shares a few seconds of autobiographical information between the future self and the past self. Though the mechanism for information time travel is unknown, we demonstrate that our understanding of space/time is non-intuitive and defined by discoveries and measurements of phenomena in nature. We interpret precognitive dreams as a function related to memory and learning, because most of the 332 precognitive experiences involve novel events, cognitive puzzles, and location cues. We speculate that the medial temporal lobe (e.g., hippocampus and entorhinal cortex) may contain the neural correlates to the phenomenon, since this brain tissue is essential for memory, learning, and navigation. We reason that cognitive models of the external world, including the anticipation of future events, provide an evolutionary advantage, which means that an intrinsic natural drive exists to find ways to sense future information. If nature permits information time travel, it should be evident in how organisms interact with their environment. One key function (or consequence) of sleep and dreaming may be to nurture instincts in animals or intuition for humans by perceiving future information. Precognitive dreams could be viewed as a stimulus repetition that primes the organism to optimally respond to future events. We also propose that personal identity is shaped by the autobiographical memories of both our past and our possible future life experiences briefly encountered in dreams. Future work should empirically verify precognitive dreams via longitudinal studies of multiple test subjects that have shared future experiences. This experimental design tackles the current problem that the dream reports of one subject are contaminated by their personal semantic associations to a future event that only they experience. If multiple individuals are exposed to the same novel, cognitively puzzling event, this will facilitate the isolation of the objective qualities of the event from the subjective factors contained in the ensemble of dream reports.

The Holographic Model of Memory and the Synchronistic and Transpersonal Dimensions of Dreaming

Barbara Koning

Den Haag, Zuid-Holland, Nederland

In this presentation, first some basic features of the holographic model for cognition and memory are being outlined. It then will be explored in what ways the model can contribute to our understanding of intrapsychic as well as transpersonal, synchronistic and psi dimensions of the dreaming awareness. Following advice given by Joseph (2002), from 2004 on I have put into practice the keeping of two parallel journals: one on synchronistic events and another on nightly dreams. I was inspired by his remark that sometimes the two diaries will coincide - when dreams and events in waking life are synchronizing. Some of the meaningfully interconnected dreams and events that I got aware of through this practice of paying attention, have made a huge impression on me. Alongside this experiential journey, I also have been studying a wide array of books about the phenomenon of synchronicity. Doing so, I came across the discussion of the holographic model in Wolff (1985). I grasped that this same model also may offer a very fruitful base for substantiating the neural correlates of certain psi phenomena like telepathy and synchronicity. I want to share the holographic model as such, and also present the assumptions which make it applicable to psi phenomena in dream state.

Part I: Presenting a few personal examples of dreams and interrelated synchronicities. Definition of the concept of synchronicity. A few examples of predictive dreams from literature. A sidestep: the relativity of time as understood by quantum physics.

Part II The holographic model for memory processing. At first a brief introduction into the light-wave hologram. Then a presentation of neural features displaying holographic qualities. Na⁺ and K⁺ ions are capable of transporting themselves through Glial cells, which movements are in the form of oscillations. These oscillations produce wave patterns of rather complex forms. The superposition principle allows for elegant combinations of waves. The whole cortical volume participates in the generation of the wave, with a capacity of 1,000,000 - 100,000,000 bits of information per local input. The neural visual system is included and creates associated visual imagery. Some arguments for this model and critical discussion.

Part III: a tentative part, a 'what if'. I will trace the assumptions under which this same model fruitfully can serve as a tool to understand the brain relating to psi related phenomena. 'What if' the energy of objects and events is being emitted through patterns of waves; 'what' if these waves transplant themselves with a speed like that of light, instantly; 'what if' the holographic neural structures can get activated and resonate meaningfully with the wave patterns received from outside and get evoke meaningful associated imagery?

Extraordinary Announcing Dreams

Kimberly R. Mascaro

Nevada City, CA, USA

Kimberly R. Mascaro will explain the phenomenon known as an announcing dream, highlight the most extraordinary announcing dreams she has collected, and examine these powerful dreams in light of the continuity hypothesis and extraordinary dream theories. This presentation developed out of Dr. Mascaro's decade plus research, beginning with her dissertation on announcing dreams. Announcing dreams can be considered a unique form of pre-birth communication between the child-to-be and his/her future family members. Announcing dreams are reported to occur during pregnancy and sometimes even months or years before conception. Expanding beyond conception/fertility dreams, in an announcing dream, the future child makes his/her presence known via visual or auditory channels, and sometimes telepathically. Through this impactful experience, important information is sometimes exchanged. While announcing dreams are often reported to be vivid and quite meaningful, lucid dream announcements and out-of-body announcements, are particularly unforgettable. This presentation will provide historical as well as modern-day cases.

Heads-Up Health Dreams: A Scientific Exploration of Precognitive Health Dreams

Carlyle Smith and Donna-Marie Newfield

Otonabee, Ontario, Canada

Background: Certain kinds of dreams appear to provide advance information about a deteriorating health condition. These dreams appear to the dreamer prior to any obvious physical sign of the disorder. We have examined these precognitive or "heads-up" health dreams and find them to have several distinctive properties. They typically have a negative emotional component. They tend to focus on the nature of the impending illness and the body location that is in danger of malfunctioning. They can provide practical "early warning" information for the dreamer him/herself or for a friend, relative or patient. They can also provide detailed descriptions about treatments. Further, ordinary individuals can have dreams about the health of complete strangers (Smith, 2013). An examination and analysis of heads-up health dreams have recently been outlined in a book (Smith, 2014). These dreams were collected from the practice of gifted medical intuitive Donna-Marie Newfield (DM).

We will be presenting new examples of health dreams that were instrumental in helping DM, as well as her family members and patients. This will be followed by a simple description of recent biology and physics discoveries to possibly explain some of the mystery surrounding these kinds of dreams. The beginnings of a theory to explain "heads-up" or precognitive health dreaming will be presented. The Hobson and Solms neural dream generation models are both based on the idea that dream content is composed entirely of stored memories inside the brain. These neural theories of dream generation have difficulty in explaining how pertinent information might arrive from outside of the brain. However, as will be shown, the dream material pro-

vided by the medical intuitive (DM) for her patients is very unlikely to have come exclusively from her own brain. She does not have a medical degree and regularly must ask professionals or search online concerning terms or procedures she dreamed about, as she has never heard of them before. While the idea that dream information sometimes comes from outside of the brain might seem radical, there are a number of recent developments in physics and biology that provide possible explanations for this phenomenon. These developments include new information about the mode of action of DNA, biophotons and torsion fields (Swanson, 2016). A discussion of these concepts at the layman level will be presented. Russian scientists have been describing energy fields around the body based on these concepts for some time, and even have units commercially available to analyze them. One researcher (Korotkov, 2017), using Gas Discharge Visualization (GDV) has catalogued many of the common maladies known to medicine using these methods. Another researcher, also using GDV (Shaduri, 2011) has shown that these energy fields begin to show abnormalities months before there is any obvious body symptoms or observable abnormalities. They can, for example, predict a future pathology such as cancer in its very early stages. While "heads-up" health dreams and this GDV system certainly differ in a number of ways, there are also some remarkable similarities. We are clearly getting a step closer to understanding the seemingly impossible idea that health dream information can come from outside of the brain and that it can precede the actual physical illness.

References

- Korotkov, K.G. (2017) *The Energy of Health*, Amazon.com.
 Shaduri, M. (2011) *The Holographic Principle and Emergence Phenomenon*, IntechOpen.com
 Smith, C.T. (2013) Can healthy young adults uncover personal details of unknown target individuals in their dreams? *Explore*, 9, 17-25.
 Smith, C.T. (2014) *Heads-Up Dreaming*, Turning Stone Press, San Francisco.
 Swanson, C. *Life Force, The Scientific Basis*, 2016.

8. Lucid Dreaming

Communication with lucid dreamers

Kristoffer Appel

Hamburg, Germany

I will summarize the current state of the art of how messages can be exchanged with lucid dreamers, using technologies such as electrooculography (EOG) or electromyography (EMG) or electroencephalography (EEG). I will also present the latest findings from my own research on the topic. The talk will be based on my experiments in the university sleep laboratory, on self-experiments at home, on scientific literature, as well as on reports on from the internet. First, I will summarize the early beginnings of communication with lucid dreamers, e.g. the eye signalling method of LaBerge/Hearne and the experiments of Fenwick et al. Second, I will present how other researchers and I further developed this idea using modern technologies such as brain-computer-interfaces or machine learning. Lastly, I will conclude my

talk with an outlook on the future of the topic. The target audience should be scientifically interested and should know what lucid dreaming is.

The Therapeutic Significance of Moving and Interacting within the Space of a Lucid Dream

Nigel Hamilton

London, UK

Results of a Lucid Dream experiment, carried out by a team of advanced lucid dreamers, will be presented. The experiment concerns the significance of directional movements in a dream, in particular left, right, up, down, going and coming out, have been studied in a lucid dream experiment. It has been shown (Hamilton 2009-2011) that in tracking the movements over a sequence of dreams, during which there is a significant shift in the dreamers' consciousness/attitude/or relationship to a particular problem, that an overall balancing out of direction in the dreams sequence takes place. Waking dream explorations of such dream movements show that a balancing out of intra-psychic forces is taking place in the process. Upon completion of the dream sequence, a symmetrical symbol appears, signifying geometrically, the balancing of the forces. The simplest such symmetrical figure is a square or a rectangle. More complex geometrical symmetries such as a cube, triangle, pyramid, circle, and sphere seem to indicate a more comprehensive syntheses of the inner psychic forces during the process of a psycho-spiritual awakening process. The experiment outlined a simple protocol for studying the effect upon the lucid dreamer of consciously tracing out the shape of a square/rectangle in the dream landscape. Such a simple movement has already been carried out consciously in a lucid dream, resulting in the appearance of the colour emerald green, which the dreamer experienced as being significant. The parameters and assumptions made will be discussed along with the results as well as the implications for the use of directional movements in lucid dreaming and in psychological work. ISAD, Chicago, June 2009, Panel: "Symmetry in Dreams and the Psycho-Spiritual Awakening Process". Nigel Hamilton. ISAD, Kerkrade, Netherlands, June 2011, Panel: "Light, Colour, Movement and Symmetry in Dreams – The Building Blocks of Lucidity and Awakening Consciousness". Nigel Hamilton. This presentation is intended for all, particularly those interested in research, lucid dreaming, the transpersonal, and spiritual aspects of dreams.

The Significance of Directional Movements in Lucid Dreaming

Nigel Hamilton

London, UK

The findings of two Lucid Dream experiments, carried out by a team of advanced lucid dreamers, will be presented. The experiments concern the significance of directions in a dream. In particular, the directions going left, right, up, down, diagonally and in a circle, have been studied in two lucid dream experiments. It has been shown (Hamilton 2014) that in tracking the movements during a sequence

of dreams, during which there is a significant shift in the dreamers' consciousness/attitude/or relationship to a particular problem, that an overall balancing out of directions in the dream sequence takes place.

Waking dream explorations of such dream movements with psychotherapy clients show that a balancing out of intra-psychic forces is taking place in the process. Typically, upon completion of a prolonged sequence of dreams, a symmetrical symbol appears, signifying geometrically, the balancing out of the forces. The simplest such symmetrical figure is a square or a rectangle. More complex geometrical symmetries such as a cube, triangle, pyramid, circle, and sphere seem to indicate a more comprehensive syntheses of the inner psychic forces during the process of a psycho-spiritual awakening process. The first experiment outlined a simple protocol for studying the effect upon the lucid dreamer of consciously tracing out the shape of a square/rectangle, or triangle and a circle in the dream landscape. The second experiment outlined a protocol for studying the effect upon the lucid dreamer of consciously tracing out the shapes of a cube and a pyramid in the dream landscape. Participants were asked to note any changes in the dream space whilst carrying out the experiment. Both experiments seem to indicate that interacting with the dream space calls forth imagery. In some cases, obstacles appear. In some cases, obstacles appeared, preventing completion of the exercise, but in the significant number of cases wherein the exercise was completed, a balance of complementary images at opposite sides or ends of the symmetrical figures was observed. This suggests subconscious and/or unconscious actions seem to exist in the lucid dream state, occurring without the conscious input of the lucid dreamer, yet having symbolic meaning (relative to the person and their situation). This latter point suggests that the lucid dreamers do not necessarily control the lucid dream. Equally important, the results show a direct link between the creation of symmetrical figures and the appearance of colour and light in the dream space, ie. suggesting a direct relationship between beautiful dream images and psychological balance. The results, parameters and assumptions made will be discussed as well as the implications for the use of directional movements in lucid dreaming and in psychological work.

Lucid Film & Lucid Dreaming Discussion

Clare Johnson

Marbach, Germany

"Painting Doors: The Art of Lucid Dreaming" skillfully recreates the magic of lucid dreaming to create a tense, exciting lucid dream story. It is 15 minutes long and features interviews with international lucid dream experts. Painting Doors won the European Cinematography Award for its Special Effects. This creative documentary was put together by media students in Stuttgart, Germany, who used Crowdfunding to create a budget for the film. These talented young filmmakers hope to inspire people to experience the wonders of lucid dreaming. Julia Kuhn, the Producer, says: "Since we specialize in visual effects, we saw in lucid dreaming a chance to use many different effects and thereby produce a documentary short with exciting and beautiful shots which haven't been shown this way in any other documentary about lucid dreaming before. No matter who we talked to

about the project, instantly everyone was interested in the topic. Which makes sense: lucid dreaming is something special. And it's something that everybody is able to learn! "This session is led by Dr Clare Johnson, author of Llewellyn's Complete Book of Lucid Dreaming and Dream Therapy. After viewing the film, we'll talk about lucid dreaming – tips, techniques, cutting-edge research, fascinating interactions with lucid dream figures, overcoming fears, and how to have a more profound, healing, and creative lucid dream life. Come and join the lively discussion and explore the exciting depths of lucid dreaming! Learn more about lucid dreaming on Clare's website: www.deepluciddreaming.com

Performing Actions in Lucid and Nonlucid Dreams

Karen Konkoly (Mallett, R., Carr, M., Mazurek, C. & Paller, K. A.)

Evanston, Illinois, USA

The scope of behavioral output that is possible during human sleep may not be as limited as commonly assumed. Here we evaluated this speculation in the context of lucid dreaming--being aware that one is dreaming while asleep. Furthermore, we combined lucid dreaming with a methodology for altering dream content, which can open up new opportunities for insights into downstream effects of dreaming and into the contrast between dream versus wake experiences. We recently developed a method of "hypertraining," whereby existing methods of cognitive training for inducing lucid dreams are accelerated in a 20-minute pre-sleep session linked with visual and auditory cues. The same cues are then presented during Rapid Eye Movement sleep (REM). This method can be considered a variant of targeted memory reactivation (TMR), by which memories are reactivated during sleep via stimuli previously associated with learning. In our prior study, this method induced lucid dreams in 50% of laboratory participants in a morning nap. However, it is unknown whether lucid dreams induced by this method would enable enough volitional control to complete complex tasks. Here, we expand hypertraining by investigating whether participants can perform a predetermined sequence of eye-movement and fist-clench actions in their dreams. One group received hypertraining in which cues were associated with lucidity, and participants were asked to, once lucid, complete the sequence of actions (lucid group). A second group of participants completed modified hypertraining in which cues were associated with mental rehearsal of the sequence of actions, but not lucidity (task group). Thus far, 9 participants in the lucid group were cued during REM; 5 completed varying steps of the task, evidenced by EOG and EMG activity (electro-oculography and electromyography) and accompanying dream reports. Four participants in the task group were cued during REM; all 4 completed parts of the task. Results showed that lucidity can be induced via hypertraining, and that lucid participants had varying levels of success in completing tasks within the dream environment. We conclude that electrophysiologically verified actions within a dream can be elicited following the hypertraining procedure, and that we can systematically manipulate dream content to engender eye-movement and fist-clench actions during both lucid and nonlucid dreams.

Flicker: A Device for Triggering Audio from Within a Lucid Dream

Remington Mallett and Ethan Oblak

Austin, TX, USA

Sleeping subjects can perform predetermined actions during lucid dreams. This has offered the opportunity for subjects to communicate to researchers from the dream by signaling with predetermined eye movements. We built a device, Flicker, that detects such eye movements during sleep and responds by playing an arbitrary audio file back to the dreamer via bone conduction. Bone conduction plays audio by vibrating bones in the skull at specific frequencies rather than the conversion of sound waves through the ear, which results in a sensation of audio playing from "inside the head." Because the audio can be triggered within the dream, a benefit of Flicker is that a subject can perform external sensory stimulation experiments without an experimenter triggering the stimulation. I'll present our device, as well as data from pilot experiments where subjects execute horizontal eye movements to trigger bone-conducted audio during a lucid dream. Flicker is designed for the possibility of home-use, and all code and a parts list are available online at <https://github.com/remrama/flicker>.

An Exploration of the Healing and Transformative Powers of Lucid Dreaming for Overcoming Depression

Lana Sackwild

Boulder, Colorado, USA

My presentation will analyse and distinguish the transformative healing effects taking place within a lucid dream that enable an oneironaut to reconcile and ultimately eradicate depression. I will explore the positive, negative, physical, mental, spiritual, and transpersonal dynamics surrounding the relationship between lucid dreaming and depression. Research was gathered in my dissertation year for my MSC in consciousness, spirituality, and transpersonal psychology.

I will cover the necessity of transpersonal approaches in the mental health field (my experiences, prescription / non-prescription drug costs & production, transpersonal vs clinical views, time & self-empowerment). I will provide a background to Lucid Dreaming: History, statistics, current knowledge and usage (PTSD, trauma, continuity hypothesis, meta-cognitive awareness, mental rehearsal, spiritual mindfulness, euphoria & empowerment, creativity & inventions). I will cover Mental Health / Mental Illness: Depression & Statistics, Suicide & Statistics, alternative drug assisted therapies, drug dependency, transpersonal & spiritual factors in relation to psychological healing, short term healing vs long term approaches.

My Central Research Question: How does lucid dreaming enable positive long-term healing and transformation in individuals, allowing them to overcome and eradicate depression? My research methods include details of transcendental phenomenological research, sampling used for gathering participants, preliminary procedures, survey, interviews & interview protocols, ethical considerations.

Findings: There were notable common experiences, emerging themes, structural descriptions of experiences shared, alternative, anomalies & exceptions, conclusions.

Hopes & Validations for the future, conscious mind states, lucid dreaming and transpersonal healing properties, reductions in the drug industry, credible transpersonal approaches in the mental health field, holistic long term treatments, future research to be conducted.

Dispelling the Shadows of the Lucid Night: A Survey of Possible Negative Effects of Lucid Dreaming

Tadas Stumbrys

Vilnius, Lithuania

Lucid dreams are generally very positive experiences – they are most often used for wish fulfilment (like flying or sex), but also for a variety of other purposes, including overcoming nightmares or fears, creative problem solving, training motor skills, seeking spiritual experiences, etc., and have a positive influence on the mood upon awakening (Stumbrys & Erlacher, 2016). In comparison with non-lucid dreamers, lucid dreamers seem to be more psychologically healthy (Doll, Gittler & Holzinger, 2009). Yet, what has a potential to heal may also have a potential to harm. Up to the present there has not been much research on potential negative side effects of lucid dreaming, although some studies suggested links with dissociation, schizotypy and poorer sleep quality (Aviram & Soffer-Dudek, 2018; Watson, 2001). The present research aims to extend these findings and examine some potential side effects of lucid dreams, also considering links with some related experiences (false awakenings, sleep paralysis, out of body experiences). An online questionnaire has been completed by several hundred lucid dreamers, who answered questions about their dream recall, nightmare, lucid dream frequency, as well as the frequency of false awakenings, sleep paralysis, out of body experiences. It also included detailed questions about lucid nightmares (see Stumbrys, 2018), emotional valence and self-reported negative effects of lucid dreams, spontaneous vs. deliberate induction of lucid dreams, as well as several questionnaires probing on potential side effects including sleep quality, dissociation, mental well-being and loneliness. The findings of the survey will be presented, discussing potential negative effects of lucid dreaming, their magnitude and influence of different independent variables. Links with related experiences (false awakenings, sleep paralysis, out of body experiences) will also be addressed. The presentation will conclude with providing a broader picture of how these potential hazards can be understood, and whether or not lucid dreaming can be considered as a risky activity.

References

- Aviram, L., & Soffer-Dudek, N. (2018). Lucid dreaming: intensity, but not frequency, is inversely related to psychopathology. *Frontiers in Psychology*, 9, 384.
- Doll, E., Gittler, G., & Holzinger, B. (2009). Dreaming, lucid dreaming and personality. *International Journal of Dream Research*, 2(2), 52–57.
- Stumbrys, T. (2018). Lucid nightmares: A survey of their frequency, features, and factors in lucid dreamers. *Dreaming*, 28(3), 193–204.
- Stumbrys, T., & Erlacher, D. (2016). Applications of lucid dreams and their effects on the mood upon awakening. *International Journal of Dream Research*, 9(2), 146–150.

Watson, D. (2001). Dissociations of the night: Individual differences in sleep-related experiences and their relation to dissociation and schizotypy. *Journal of Abnormal Psychology*, 110(4), 526–535. Target audience: Intermediate.

How Lucid Dreaming Provides Evidence for Jung's Second Psychic System

Robert Waggoner

Ames, IA, USA

Lucid dreaming allows for consciously experimenting and exploring in the dream state. Many lucid dreamers report engaging a responsive awareness, when ignoring the dream figures and simply asking questions within the lucid dream. Jung proposed we may have an inner 'second psychic system' and this second psychic system would likely display certain characteristics (which he enumerated). Jung noted that the discovery of a 'second psychic system' would be of "revolutionary significance". In my first book, *Lucid Dreaming - Gateway to the Inner Self*, I recounted my first lucid dream experience in 1985, where a dream figure did not respond to my question, and instead a non-visible voice replied. Since that time, and the publication of my book, many others have followed my suggestion to ignore dream figures, and simply ask questions or make requests in the lucid dream -- and hear, see or experience the reply. In his writings, Carl G. Jung wrote: "We have no knowledge of how this unconscious functions, but since it is conjectured to be a psychic system it may possibly have everything that consciousness has, including perception, apperception, memory, imagination, will, affectivity, feeling, reflection, judgment, etc., all in subliminal form." He also noted: "If the unconscious can contain everything that is known to be a function of consciousness, then we are faced with the possibility that it too, like consciousness, possesses a subject, a sort of ego... [which] brings out the real point of my argument: the fact, namely, that a second psychic system coexisting with consciousness – no matter what qualities we suspect it of possessing – is of absolutely revolutionary significance in that it could radically alter our view of the world." In lucid dreams of interacting with this non-visible awareness, many lucid dreamers discover that it possesses the characteristics of consciousness, as listed by Jung. Therefore, lucid dreaming seems to provide observational evidence in support of the existence of an Inner Self. In my presentation, I will give examples of how this non-visible awareness also refutes requests, or may point out the error in the lucid dreamer's assumptions. Lucid dreaming appears to offer support "to radically alter our view of the world" and possibly to confirm one of Jung's assertions.

Lucid Dreams and the Significance of Spatial Exploration

Robert Waggoner

Ames, IA, USA

Lucid dreaming allows for a wide spectrum of experiments. Besides lucidly experimenting with dream figures, dream activities and mind-body influences (as seen in the work of

researchers like Stumbrys, Schredl, Erlacher and LaBerge), the lucid dreamer can also experiment with space and spatial movement. Carl Jung noted that the ‘shadow’ or the denied, ignored or repressed aspects of the personality often occupied the space behind the dreamer, which emphasized the unseen and ‘not faced’ relationship with the dreamer. However once lucid, the lucid dreamer can change his or her relationship with the shadow space or the shadow element there, by bringing it immediately before him (e.g., consider the powerful lucid dream on p 17-8 in *Lucid Dreaming – Gateway to the Inner Self*). By making changes in spatial relationships, sudden changes and breakthroughs seem more likely to occur. In the 2017 IASD conference, Dr. Nigel Hamilton and I presented preliminary findings of lucid dreamers who consciously made geometric movement in the lucid dream (i.e., a square, triangle or circle) and the resulting spontaneous changes in the lucid dream. In this presentation, we further the research by asking lucid dreamers to move beyond making a simple geometric shape on a horizontal plane in the lucid dream, and instead, to move in such a way as to make a 3-D cube or pyramidal shape in the dream space, while recording all events which spontaneously emerge as they do so. Such experiences suggest the following: 1) ‘space’ in dreams may contain inherent symbolic or psychological value/s, 2) the spatial relationship between perceiver and object/figure directly suggest important elements of the dynamic relationship potential, 3) movement in dream space appears to reflect symbolic and psychological change, and 4) though often overlooked by most lucid dreamers, certain defined movements may serve as triggers to a shift in experience or a shift in consciousness, which would be reflected in the lucid dream report. Since lucid dreaming allows for experimentation, these suggestions can serve as possible hypotheses for future research and personal investigation.

9. Research/Theory

Understanding Dreams of the Deceased

Joshua Black, Kathryn Belicki, Hannah Hughes, Robert Piro, Aubrey McCann, and Jessica Emberley-Ralph

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Preliminary evidence suggests that dreams of the deceased are common, yet little is known about them. We conducted four studies with community samples of bereaved individuals. Two studies involved “classic” grief—loss of a romantic partner or spouse ($n = 268$ & $n = 218$) — while two involved disenfranchised grief—grief that lacks adequate, social support. One of these involved death of a pet dog or cat ($n = 199$) and the other the pre-term death of a baby (miscarriage or stillbirth; $n = 226$). In three studies, participants rated the positive versus negative qualities of dreams in which the deceased was seen or heard, and in three studies participants provided reports of their most memorable dreams. These reports were content analyzed and scored independently by two raters. In addition, participants completed measures of traumatic grief symptoms, continuing bonds (the tendency to maintain a bond with the deceased), attachment secu-

urity (3 studies), relationship closeness (2 studies), and post-traumatic symptoms (1 study). Most participants reported having dreamt of the deceased (86.2% with partner loss, 74.9% with pet loss, and 57.5% with pre-term baby loss). One surprising finding, given that prior research has amply demonstrated that “ordinary” dreams tend to be more negative than positive in tone, and posttraumatic dreams tend to be very negative, was that positive dreams predominated. In particular, dreams that involved active interaction with the deceased tended to be positive, while dreams that were negative in tone were more likely to depict the state of the deceased (e.g., that they were ill, or dying, or in need of rescue, or lost and couldn’t be found). An inspection of the themes that emerged from the content analyses, and the pattern of the correlations between dream ratings and measures of grief, continuing bonds, attachment and closeness suggest that dreams of the deceased can be classified into different types. One involves active interaction with the deceased, is usually positive in tone, and likely reflects the maintaining of a comforting attachment, which in turn may facilitate emotion regulation. Another common category are dreams that reflect reminiscence, the dreaming equivalent of thinking about and remembering the deceased. A minority (at least in these samples) of dreams are negative in tone and appear to represent explicit or implicit rumination on the traumatic aspects of the death. Clinical implications of the findings will be discussed, as well as recommendations for future research.

Effects of Dream and Event Discussions on State Empathy

Mark Blagrove and Gulley, I., Brownlee-Jones, E., Price, A., Beeden, R., Carr, M., Richards, M., Lockheart, J.

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We have previously shown that frequency of dream sharing is associated with trait empathy (Blagrove et al., 2018 a,b & c). This experiment extends that work by addressing the effect of dream discussions on state empathy. It hypothesises that individuals with whom dreams are shared and discussed have increased empathy towards the dream-sharer, in comparison to event-sharing or dream recording without discussion. Discussions are between two people, termed the sharer (who provides the dream or event report) and discussant. The rationale is that the discussion of personal information increases empathy of the sharer and discussant towards one another; the hypothesis is that this increase will be greater for the discussion of dreams. A further speculative rationale is that there is an evolutionary pressure for the sharing of fictional reports, and that these can engender empathy to a greater extent than do non-fictional reports. The study has a between-subjects design with three groups: dream discussion, event discussion, and wait group dream discussion. We measure state empathy on six occasions, once at baseline and then after each time a dream or event is discussed (groups 1 and 2, respectively) or reported (group 3). An adapted Shen state empathy questionnaire is used to assess empathy of listeners and dreamers. This has items such as: I recognize my friend’s / partner’s situation. I can relate to what my friend / partner goes through. My friend’s / partner’s reactions are understandable. I can identify with my friend / partner.

Procedure: There are 3 groups of paired participants. Group 1 - One of the pair records their dreams for a 2 week period (5 dreams) and the pair discuss the dreams as they occur. Once the discussion has been completed, both of the pair complete the empathy questionnaire and the sharer completes the Gains from Dream Interpretation questionnaire. Group 2 - One of the pair records events that have happened to them over a 2-week period (5 events) and the pair discuss these event reports as they occur. Once the discussion has been completed, both of the pair complete the empathy questionnaire and the sharer completes the Gains from Event Interpretation questionnaire. Group 3 - One of the pair records their dreams (5 dreams) across a 2 week period, but the pair do not discuss the reports until the end of the 2 week period. Once a dream has been reported on the study website, both of the pair complete the empathy questionnaire. Once the 5th dream has occurred and all 5 dreams are discussed in one session, both of the pair complete the empathy questionnaire and the sharer completes the Gains from Dream Interpretation questionnaire. Data collection is underway and will be completed by the end of January 2018.

Reactivating and Consolidating Memories in Sleep and Dreams

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We commonly dream of experiences and information gathered from our waking life, sometimes on the very night after they happen, though it is still not known for certain why. Recently, a hypothesis has been proposed that dreaming might be a part of the memory consolidation processes which are now accepted to take place during sleep (e.g., Wamsley, 2014). It is believed that recently acquired memory traces are systematically reactivated in sleep, which strengthens and integrates them into existing neural memory networks (Rasch & Born, 2008). The hypothesis that dreaming may be the conscious experiencing of this process is starting to be explored, and already has some partial support in the form of indirect overlaps with the memory consolidation literature (Schredl, 2017). For example, both memory consolidation and dreaming are selective. Recently learned information that is tagged as being important for the future in some way is selectively consolidated over less important information (Wilhelm et al., 2011); meanwhile, dreams are often influenced by waking events that are considered to be a major concern or personally significant in some way (van Rijn et al., 2015), even future events like a big exam (Arnulf et al., 2014). But it has yet to be experimentally tested if dreaming of such important things in this way is of any benefit to the information associated with it.

Targeted Memory Reactivation (TMR) is a technique that may be able to address this question. In TMR, information is learned in the presence of a sensory stimulus (usually an odour or sounds) which becomes contextually associated with the learned information. Then during sleep, these stimuli are re-presented to the sleeper, and the memories which were associated with the cued stimulus are usually selectively enhanced, producing a greater behaviourally measurable improvement when retested after sleep (Rasch, Büchel,

Gais & Born, 2007). However, dream content has yet to be considered in such experiments. This is especially noteworthy in that the sensory cues themselves might also affect dream content, or even be incorporated into the dream itself (Dement & Wolpert, 1958), possibly producing task-related content (De Koninck & Koulack, 1975; Schredl, Hoffman, Sommer & Stuck, 2014). In a novel attempt at identifying relationships between dreaming and memory consolidation, we present a TMR experiment with exploration of dream content. 45 participants engaged in procedural memory-based learning tasks in the form of virtual reality (VR) video games (an Archery and a Basketball challenge) before sleep. During overnight deep sleep in the first half of the night, the audio from either the pre-sleep Archery or Basketball game was replayed quietly through ceiling speakers in the bedroom. In the morning, participants played the games again to measure improvement, and also provided dream reports (obtained during a nocturnal and morning awakening) and rated them in terms of similarity to the VR games. Both of these variables were statistically compared between the two cueing groups and a third control group which was exposed to no cueing during the night. It was hypothesised that the respective groups will show greater improvement on the task that was cued compared to the one not cued, and will also show greater similarity to the tasks in dream content compared to controls. The results of this currently ongoing experiment will be presented and discussed in relation to existing previous work, and how they may inform future directions in scientific dream research.

Logic of Dreams, Art-Based Research and Developing Scientific Methodology

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The dreaming mind inherently is creative as it collages a host of related and unrelated experiences together to produce a dream. Dreams can weave waking day residue with current, past, and future concerns along with the complex influence of emotions, psychology, and physiology. The surreal nature of the dreaming mind contains its own logic. What seem to be bizarre from the point of view of the waking self can make total sense from the perspective of the dreaming self. How could this continuous consciousness of waking to dreaming work together to contribute to scientific knowledge? If dreaming is the art of the mind, the dreamer is the artist with wild creative ideas and expression beyond the imagination of the waking self. The communication between the two selves—dreaming and waking—can happen through lucid dreaming. The waking rational mind can conduct observational research or other testing in a lucid dream. In addition, a dream explored through a creative process, can trigger unexpected insights, solve problems, and support epistemological belief that leads to innovative methodological approaches. The influence of waking on dreaming is apparent, yet dream's connection with waking depends on a level of attention or action. What are the presuppositions of the way in which dreams are incorporated into waking? Could dreams be a source for scientific inquiry? Could scientific methodology be created and developed by dreams? Could creative action through dreams inspire scientific methods?

Could art-based research be the bridge between dreams, art, and scientific inquiry?

This process and connection between dreams, art, and scientific inquiry will be illustrated through the involution and evolution process. The philosophical concept of involution and evolution is rooted in the work of western philosopher Hegel; eastern philosopher Sri Aurobindo; and surrealist painter Gordon Onslow Ford. In relations to dreams, involution is a movement towards the inner worlds of dreaming, evolution is coming out to the waking. Dream phenomenology + waking creative action (Art) = insight and knowledge. Scientific methodology can be developed from gathering data (material), observation, testing (creation). This combination can happen depending on the researcher's innovative predisposition and bracketing presuppositions. For example, the method of "fringing" that was revealed in my lucid dream in 2002 demonstrates that dreams can first introduce a novel idea as a result of dream incubation. The seemingly irrational dream behavior of fringing, which I chose to do in waking, resulted in my receiving further insights. The subsequent dreams revealed that the bizarre action in the dream, fringing a raw canvas, was a mode of meditative inquiry. The method was tested in waking and was followed by another dream that implicated social action. The cocreation between the dreaming and waking self resulted in the development of the art-based research of asking participants to fringe and write a description of their experience. Through theme analysis, it became apparent that the act of fringing assisted an involution process—an embodied meditative practice as prescribed by the dream.

References

- Bogzaran, F. & Deslauriers, D. (2012). *Integral Dreaming: A Holistic Approach to Dreams*. Albany: SUNY.
- Selz, P. & Brodzky, A. (2013). *Fariba Bogzaran: Lucidity*. San Francisco: Society for Art Publications of the Americas.
- Eisner, E. (2008). *Art and Knowledge*. In *Handbook of the Arts in Qualitative Research*. Edited by J.G. Knowles and A.L. Coles. Thousand Oaks, CA: sage, 2008.

Dreaming Is Play: A Bridge Between Art and Science

Kelly Bulkeley

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This presentation offers a theory that dreaming is a kind of play, the imaginative play of the mind during sleep. This theory has directly inspired me in new activities with art and artists: supporting regional theater, collaborating with the Dream Mapping Troupe, and cultivating a forested dream library. The scientific basis for this presentation derives from research in the fields of evolutionary biology, neuroscience, developmental psychology, content analysis, and religious studies. More details can be found in Bulkeley, *Big Dreams: The Science of Dreaming and the Origins of Religion* (Oxford University Press, 2016).

The first part of the presentation will provide an overview of the theory that dreaming is a kind of play. This will include discussion of the various roles of play in mammalian evolution and its specific functions in the development of human behavior and consciousness. The second part will consider live theater as an art form that provides a powerful space for collective dreaming. Jung, Perls, and others have likened

dreaming to a kind of internal theater of the mind. This part discusses what I have learned from the company of artists at the Oregon Shakespeare Festival in Ashland, Oregon (the site of the 2021 IASD conference). These experiences include the role of dreaming in actor training, the dream-like qualities of attending a live performance, and the special qualities of plays that foreground dreaming. The third part will describe the developments (so far) with an international group of artists devoted to a collaborative project on dreaming. The Dream Mapping Troupe is the name of the group, and I have been both co-director of the project with Alisa Minyukova and also a participant in the group creative process we have been developing. This process centers on sharing a "big dream," and then exploring that dream in ever greater depth, from an ever wider variety of perspectives. Out of this process, each participant is creating a special work, and the group as a whole has woven these efforts into a collaborative performance exhibit on display here at this year's conference. The fourth part will share plans, designs, and images for a future dream library, set in a forested landscape I am currently cultivating in accordance with a set of dream-inspired creative principles revolving around beautiful patterns, natural harmonies, networks of relationality, moments of wonder, dynamic collaboration, and consistent effort over time. The fifth and final part will reflect on the scientific implications of engaging more deeply with these playful realms of dream-related artistic activity.

Proposal of a Pyramid of Layers of Dream Construction and a Typology of Dream Function Theories

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First, a pyramid of layers of factors that modulates the construction of dreams is proposed, followed by a typology that distinguishes between types of dream function theories depending on their reliance on waking consciousness to achieve their goals. Theoretical review abstract: More than 60 years of scientific studies of dreaming have identified a host of factors that seem involved in the construction of dreams. We propose first a hierarchy in the sources of dream formation that is illustrated in form of a pyramid with layers that are placed in order of their proposed importance in the determination of the final dream experience. At the bottom lies the neurophysiological status such as the sleep stage during which the dream occurs and its circadian chronobiological position. At the very top are internal and external stimulations that can be incorporated in the final dream scenario. In between are the layers representing the cognitive capacity, age and maturation, followed by emotional expression, culture, personality, memory traces and pre-sleep experiences. It is suggested that the lower level factors are predominant and that higher ones still shape the content of dreams but with decreasing influence. Of course, in special situations, such as following traumatic events, some factors can gain more influence. It is hoped that this model can be useful in the evaluation of hypotheses of dream formation particularly that of continuity between waking and sleeping.

A second illustration is used to propose a typology of dream function theories based on what is the contribution of

waking mentation in achieving their roles. The bench mark is established in the context of changes between pre-sleep and post-sleep psychological status in the morning or on long term adaptations that can be attributed to dreaming. The simplest ones are those who attribute a function to dreaming without them reaching waking consciousness by awakening and recall. The best example is Freud's function of dreams as Guardians of Sleep. Then come theories that rely on the recalling of dreams which exercise their influence on morning awakening psychological state. Finally are the theories that require dream interpretation to achieve their impact on waking adaptation. The importance of distinguishing between types of theories is stressed particularly when it comes to testing them empirically, since different methodologies are required.

Process Analysis of Insight Generation within REM Dream, N2 Dream and Daydream Discussions

Chris Edwards (Blagrove, M., van Rijn, E., Reid, A., Malinowski, J., Carr, M., Eichenlaub, J-B., Ruby, P., Bennett, P., McGee, S., Kennedy, A.)

Swansea, Wales, UK

The presentation will describe a process analysis of the generation of insight within group discussions of REM dream, N2 dream and daydream discussions following Ullman's dream appreciation procedure. Montague Ullman's (2006) dream appreciation procedure was designed to assist individuals in the consideration of possible connections between aspects of their dreams and their recent experiences from waking life. The outcomes of three studies indicate that individuals who shared their dreams and discussed them, using Ullman's dream appreciation procedure, experience insight during the discussions (Blagrove et al., in press, Edwards et al. 2015, Edwards et al. 2013). Researchers have found, using process analysis of discussion session transcripts, that different types of insight generated within discussions following Ullman's dream appreciation procedure, such as spontaneous realisation, increased understanding of personal concerns, increased understanding of personal feelings and understanding of symbolism which links dream experiences with waking life experiences (Malinowski & Edwards, in press, Edwards et al., in preparation).

The presentation describes a process analysis of insight generation within the dream and daydream discussions of the study by Blagrove et al. (in press), using session transcripts. This study involved the collection of REM dream, NREM dream and daydream reports from participants who spent one night in a sleep lab and then returned to discuss their dreams and daydreams using Ullman's (2006) procedure. 31 participants were involved in the study, which involved 86 dream or daydream discussions and each discussion lasted up to forty minutes. Results of the process analysis will be described. Evaluation of the findings in terms of the function of the Ullman procedure and in the broader context of dream work techniques will be made.

A New Approach for the Comparison between Dream Content and Daily Life Experiences

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The continuity hypothesis does not account for discontinuities in dreams. Furthermore, correlations between dreams and daily life are weak. Direct associations between dreams and daily life experiences provide additional insight into the complexity of dreams. Time-separated daily life experiences are mixed up in dreams and produce entirely new creative imagery.

Research and Theory Introduction: The continuity hypothesis states that much of the dream content is continuous with the dreamer's waking conceptions and concerns about the main people, the nature of social interactions with them, the dreamer's activities and interests (Domhoff, 1996, 2007). However, direct matches for example with dream reports and waking diaries are less clear (Roussy et al., 1996; Roussy et al., 2000). Furthermore, MacNamara (2007) questioned how the continuity hypothesis could explain discontinuities obviously present in dreams. Apparently, the mechanisms of dreaming are more complex and prevent straight forward correlations and interpretations. **Approach:** In this study a new method of comparison between waking diary reports and dream reports is presented. Based on the dream content, annotations were made about the primary associations between details of the dream experiences and daily life experiences.

Results: 611 dreams, collected over 2 years, have been analysed. On average 6603 annotations were made, 10.81 per dream. 4099 annotations or 62% were recognized as uniquely time-related, predominantly related to experiences one or two days before the dream, but with a long tail to earlier periods. 34% of the annotations were non-time informative or doubtful. 4% of the annotations referred to old daily life experiences which were recently reactivated. Per dream, the average number of recognized time-separated past experiences amounts to 3.2. In addition, in many dream experiences, amalgamations of time-separated memories do occur in one scene. This results in creative dream images or dream experiences that never existed before. Some examples of visualisations of dream imagery, considered as amalgamations of past experiences are presented.

Conclusions: The correlation between dreams and daily life experiences reported in diaries is biased: 1) Many dream fragments show relations with unimportant details of daily life, which will almost never be written down in a diary; 2) Dream fragments and visualizations are frequently composed of an amalgamation of experiences from different daily life periods; 3) Within one single dream a number of events based on different experiences from different periods can occur; 4) A part of the dream experiences is based on recently reactivated older experiences; 5) Sometimes multiple, time-bound interpretations are possible; 6) Our dream drawing analysis shows that entirely new experiences can occur, created in our dream and with no clear one-to-one relationship to past experiences.

Color in Dreams: A Scientist/Artist Perspective

Jayne Gackenbach

Edmonton, Alberta, Canada

Color in Dreams: A Scientific Analysis of the Artists Expression This is a case study of a scientist, the author, who has been an artist, if by avocation, longer than a dream scientist. Recently, she realized that she very often has a key color in her dreams. In this presentation, the science about color in dreams, along with a personal experience of color in dreams as it relates to painting expressions of the dream, will be explored both quantitatively and qualitatively. Hoss (2018) points out that laboratory dream studies have shown that while most dreams are in color (70% to 83%), only about 25% report colors in their dreams outside of the dream laboratory. This researcher makes a strong case that color has emotional association and that when something is colored in a dream it adds to the emotional impact of the item in the dream. This exploration is due to the idea that color in dreams may be related to the authors dream related artistic endeavors. Thus, a year was picked where she did the most artwork based upon previous nighttime dreams. In 2015, 210 dreams were recorded on 154 days. The number of dreams recorded that year ranged from seven to 31 with a mean of about 17 dreams per month. Colors were mentioned 228 times in these 210 dreams. Most noteworthy of these color mentions was the high incidence of white and black relative to other colors, followed by red. As Hoss (2018) notes when black or white is mentioned in a dream transcript, the author means that in the dream there was mention of the whiteness or blackness of an object or person or scene, rather than simply the oft observed "my dreams are in black and white". The purpose herein is to connect these colors to the waking art work that emerged from the dreams. While only 26 of these 210 dreams were painted, they were chosen to paint due to their emotional impact and their relevance to waking events. All but two of these 26 dream/paintings occurred in the first half of the year.

There was a four and half month gap between the first two dream paintings of the year and the remaining 24. The years dreams were split into two proximate half year sections with color words examined in each half. The dreams prior to June 26 had 11,987 words (37.5% of the years dreams) while those afterward had 19,922 (62.5%). While it appears that here are more colored words in the second half of the 2015 dreams, when more painting dreams occurred, that difference appears to echo that there are more words in the second half. Subsequent statistical analysis did not support this assumption. The time length of each half tells another story. The first half is 176 days while the second half has 189 days of the dream diary. In other words. There were more words and more colored words in the second half which was also associated with more painted dreams. When the painted dreams were examined alone, 81% had at least one color mentioned in the dream. However, the author was not motivated to paint a dream due to a color in it, rather it was more about the emotion of the dream. The question for the author is why such feverish painting of dreams? This will be considered along with a few of the color in dreams/painting examples.

Emerging Implications of Virtual Reality Video Game Play on Dreams

Jayne Gackenbach

Edmonton, Alberta, Canada

A recent study on the use of virtual reality (VR) technology on subsequent nighttime dreams is the focus of this presentation. This study was conducted by Gackenbach's two former students from MacEwan University, Neelinder Rai and Braden Wagner, under her supervision. VR is a computer simulated environment that replicates the experience of being present in another location (presence). It suggests that the user will have sensations that result in the perception of objects found there as equally present. How much one feels present in another location depends on how well the VR technology creates immersion, which refers to the degree to which a virtual environment submerges the perceptual systems of the user in computer-generated stimuli. The environment created while dreaming creates a strong sense of felt presence, which is similar to playing games in a VR headset. Therefore, there is a transfer of certain characteristics from a game played with a VR headset into one's dream, known as the game transfer phenomena.

The VR console used in this study was the PlayStation VR headset and goggles, complete with headphones and paired to PlayStation 4 gaming console. The game used was Resident Evil 7: Biohazard. This is a first person shooter game based around a survival-horror theme. It was an ideal fit for our research study because the first-person shooter element created a strong sense of presence and immersion when played in VR, while also being compatible in 2D. In this proposed research study, we compared the dreams of those who experienced VR versus those who did not. Earlier directly related studies looked at the relationship between the immersion created by virtual reality headset (oculus rift) and nighttime dreams. They concluded that the level of presence felt did increase with using VR headset and there may have been an effect on memories of dreams, but the results were equivocal. The hypothesis was that the dreams of those who use the PlayStation VR will have a deeper sense of control, be more vivid, and may be more lucid. A total of 85 participants were run (all male), with the average age of 19 years old. Dreams were analyzed using Threat simulation (Revonsuo & Valli, 2000), Lucidity and Consciousness (Voss, 2012), and a game content scale for Resident Evil 7 created by our research team. In addition, self-report questionnaires were administered.

What we found from the results was that the locations from Resident Evil 7: Biohazard appeared more in the dreams of those who played the game session in VR. Participants who played in VR also felt more presence during gameplay, as well as rating their dreams to be higher in control for both the in-lab as well as the post-lab dreams reported. These results further strengthen the argument that there is indeed a fine line between the biologically created virtual realities i.e. dreams and environments created by VR technology, and a certain overlap of characteristics between the two.

Internet-based Treatment of Nightmare Disorder: A Randomized Controlled Trial

Annika Gieselmann

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The study tested the effects of Internet-based Imagery Rehearsal Therapy (IRT) and compared it with two control groups. Results indicated that patients concerned improved in both nightmare frequency and nightmare distress. Effect were the better the more the interventions were able to induce perceived mastery. e) research f) Reoccurring nightmares that cause a significant level of distress could be diagnosed as nightmare disorder (American Psychiatric Association APA, 2013) although, in practice, it is rare to diagnose a chronic nightmare disorder and although evaluated treatment exist such as Imagery Rehearsal Therapy (IRT; Gieselmann et al., in press; Morgenthaler et al., 2018), patients concerned often remain untreated. Here, the Internet may help to bridge the gap between knowledge and patients.

Method. The current trial investigated (a) the efficacy of Internet-based IRT, (b) the role of imagery rescription, and (c) the role of guidance during Internet-based IRT. A total of 127 patients that suffered from mainly idiopathic nightmares were randomly assigned to 1 of 2 IRT internet-based groups (guided IRT; unguided IRT) or to 1 of 2 active control groups (frequency control group; narrative control group). **Results.** Internet-based IRT was more effective than a nightmare frequency control condition with respect to nightmare frequency and nightmare distress. Compared to the narrative control group, IRT was only superior in improving nightmare distress but not in nightmare frequency because the narrative control group also improved regarding nightmare frequency. Guidance by a nightmare coach did not affect efficacy, compliance, or dropout. **Discussion.** Internet-based IRT seems to be an effective treatment even when offered with minimal guidance by a nightmare coach. Describing the nightmare narrative in detail already decreased nightmare frequency, but it did not decrease nightmare distress. With regard to reducing nightmare distress, IRT was superior to the narrative control group. Thus, the better the intervention can induce perceived mastery the better the treatment outcome (Gieselmann, Böckermann, Sorbi, & Pietrowsky, 2017).

References

- APA. American Psychiatric Association (2013). In Diagnostic and Statistical Manual of Mental Disorders. DSM-5. Arlington, VA: American Psychiatric Publishing.
- Gieselmann, A., Ait Aoudia, M., Carr, M., Germain, A., Gorzka, R., Holzinger, B., . . . Pietrowsky, R. (in press). Etiology and treatment of nightmare disorder: State of the art and future perspectives. *Journal of Sleep Research*. doi:10.1111/jsr.12820
- Gieselmann, A., Böckermann, M., Sorbi, M., & Pietrowsky, R. (2017). The effects of an Internet-based imagery rehearsal intervention: a randomized controlled trial. *Psychotherapy and Psychosomatics*, 86, 231-240. doi:10.1159/000470846
- Morgenthaler, T. I., Auerbach, S., Casey, K. R., Kristo, D., Maganti, R., Ramar, K., . . . Kartje, R. (2018). Position paper for the treatment of nightmare disorder in adults: An American Academy of Sleep Medicine position paper *Journal of Clinical Sleep Medicine*, 14, 1041-1055. doi:10.5664/jcsm.7178g

Dormio: Automated Serial Incubation of Hypnagogic Dreams

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We present Dormio, an interactive system and novel methodology for dream direction and capture during hypnagogia. The focus of this poster is the role of biometric-based audio in designing systems to direct hypnagogic dreams. This poster presents Dormio's wearable sensor design and voice interface. Initial experiments with Dormio (n=12) show the feasibility of incubating an experimenter-chosen theme into dreams, as well as automatically capturing dream reports enabling memory of hypnagogic experience. The frequency of direct incorporation of experimenter-controlled dream themes in multiple dream reports in our sleep onset studies reported here are higher than observed in any previous investigation. We present a set of applications for this technology, as well as implementation of tracking hardware and supporting software. We discuss the results of our pilot study (n=12), showcasing the usability and comfort of the system. Dormio enables control over hypnagogic dream content, opening up possibilities for augmentation of daytime creativity, learning and memory. The hypnagogic state, and the dreams present at sleep onset, provide ideal conditions for interfacing with the sleeping mind to direct dream content. Hypnagogia lasts only minutes at sleep onset, allowing for efficient interfaces; hypnagogia happens in naps, meaning interventions do not put the full night's sleep cycle at risk; and multiple studies offer evidence of vivid dreams present at sleep onset, including imagery which apparently arises directly from recent waking experience. Artists and engineers from Dali to Edison famously used the simple 'steel ball technique' to capture hypnagogic dreams: napping with a heavy object in hand and, when muscle control lessened and the object dropped to the floor, awakening during sleep onset. But this technique allows for only one entry into hypnagogia, as it jolts users fully awake, it sets no reliable protocol for the capture of multiple dream reports, and it allows for no reliable dream control. Going beyond the 'steel ball technique', the control of dream content has been an aim of sleep scientists for decades. Sleep laboratory techniques provide inspiring protocols for dream direction across hypnagogia, deep NREM sleep and REM sleep, yet protocols used in laboratories have consistently required expensive PSG equipment, supervising clinicians and often hours of pre-sleep training. We present Dormio, which allows for inexpensive, mobile, reliable control of hypnagogic dreams to translate sleep science out of the laboratory. **Sequential Description: Literary references to past hypnagogia and incubation work** (Stickgold, 2000; Nielsen, 2017; Mavromatis, 1987). Dormio sensor design, hardware design, software design. Dormio experiments on incubation and usability. Dormio future use cases. Open source software and hardware designs for audience members.

Are there Benefits to Dream Content?

David Kahn

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Continuity of dream and wake reactions help make dream content relevant no matter how illogical dream content may be. The potential benefit of dream content is that we are able to see how we react in new situations and how we react to new behaviors, our own and others'. The potential benefit comes from continuity between wake and dream reactions and the introduction of new scenarios through dreaming. What are some of the things that happen when we are dreaming? In dreaming we break the habit of being our self, and at the same time remain our self. We break the habit of being our self by 1) indulging in new behaviors, 2) blurring what has already happened in the past with what is happening now, 3) forgetting aspects of our self, such as how old we, friends and family are, But at the same we remain our self, by thinking and reacting to people and situations as we would when awake. That is, our thinking and our reactions to what we and other people are doing in the dream are similar to our thoughts and reactions when awake, even though we rarely question the logic of the dream, Kahn and Hobson (2005); Kahn, Reactions and feelings within a dream continuous with wake state reactions and feelings (submitted for publication); also published as an IASD presentation 2017, "Reactions and feelings by the dream self towards other dream characters and events". There are many anecdotal reports about benefits of dream content, and a few evidence-based studies such as the improvement on navigating a maze (Wamsley, E. J., Tucker, M., Payne, J. D., Benavides, J. A., and Stickgold, R. (2010). Dreaming of a learning task is associated with enhanced sleep-dependent memory consolidation. *Curr. Biol.* 20, 850–855), and improvement on recovering from depression, Rosalind Cartwright, *Sleep Med Clin* 3 (2008) 157–166. The Contribution of the Psychology of Sleep and Dreaming to Understanding Sleep-Disordered Patients. A next step is to develop a new evidence-based study that can test our theory that the breaking of the habit of being oneself while dreaming, and yet maintaining oneself on a reactive-feeling level, will help the dreamer to learn more about him or herself, for example, by giving insight on how he or she reacts in new situations.

iBand+: A Novel Wearable EEG Sleep Tracking Headband

Simon Kern, Frank Schoofs, Samir Raut

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Polysomnography (PSG) is widely used in sleep and dream research and has been the gold-standard for sleep stage determination for many decades. However, it has been shown that the unfamiliar laboratory setting has a large influence on sleep quality (Toussaint et al. 1995) and dream content (Domhoff and Kamiya 1964). In addition, PSGs are time- and cost intensive and are largely inaccessible to laypeople. A mobile, light-weight, non-disturbing recording modality would facilitate somnological research as well as making sleep research accessible to the personal domain.

Furthermore, most consumer sleep trackers (such as apps and fitness trackers) are based solely on accelerometer data or heart rate. Using only these modalities, it might not be possible to accurately distinguish between REM and quiet wake. To address this issue, the inclusion of EEG as a primary recording modality is necessary (Ko et al. 2012). We have developed iBand+, a wearable EEG-based sleep tracking headband for sleep quantification. Using a single-channel frontal EEG and accelerometer, the band can be used to distinguish between Wake, Light, Deep and REM sleep. All computations can be performed on-board and stored on an SD-card, which eliminates any potential disturbance that might arise in electro-sensitive users due to active Bluetooth or Wi-Fi. Several studies have already demonstrated the possibility of lucid dream induction via external stimulation (Stumbrys et al 2012). Therefore, the device has been equipped with stimulation capabilities using light and auditory stimulation to facilitate lucid dream induction.

A study has been conducted to test the signal quality of the iBand+ prototype. Twenty participants were recorded for at least one night wearing the iBand+ prototype. Simultaneously, a gold standard reference PSG was obtained using a Philips Alice 5. First results indicate that the prototype can accurately record all sensory modalities, including frontal EEG. A spectrogram analysis revealed a high correlation between the iBand+ EEG (Fp1-Fp2) and a reference PSG recording using F4-A1 or Fp1-Fp2. Due to the frontal location, electrooculography signals (EOG) can be extracted for REM detection or lucid dreaming verification. Using the sensory data (EEG and accelerometer), it is possible to accurately determine the sleep stage. This will enable the user to play stimulation during a preferred sleep stage, e.g. for lucid dreaming induction. Conclusion: The developed sleep monitor shows that sleep quantification using a wearable device is possible and that it may be used for non-clinical applications and personal use instead of a time- and resource intensive stationary PSG recording. Several studies have already shown the possibility of aiding lucid dreaming induction using light or auditory stimulation played during REM. Therefore, future studies should try to show to what extent this device can help lucid dream induction, as well as which sensory stimulation modality and training protocol is most efficient in doing so. Additionally, further development will investigate the feasibility of extending the iBand+ prototype to other recording modalities such as heart rate, temperature or microphone (e.g. for snoring and sleep talking) and tactile stimulation.

REM Dreaming: The Evolutionary Backstory?

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Early humans were hunter-gatherers. Our pre-agricultural period, when, like animals, we had to find our food, occupied 2.5 million years. Most animals stay within a "home range", a known territory which makes food gathering and avoiding predators more efficient. Within any home range, they undertake regular tours to places with resources (food sites and waterholes) whilst, if possible, avoiding predators. Undertaking such tours over 2.5 million years may have given rise to the pathways and landmark junctions (representing places with resources) which characterize brain

memory networks. The brain cells which fire when animals visit places with resources fire again during sleep, indicating animals dream about the places they have visited. Dreams which identified any visual patterns in predator behaviour, to predict their presence at places with resources, would have enhanced the survival of animals and early humans. The behaviour of living beings, including predators, is a non-obvious, complex pattern which requires detection. To detect the pattern, early humans would have had to extract elements from different predator-related experiences and associate them. Consequently, I propose that non-obvious visual associations in REM dreams were, archetypically, associations between elements of different memories of predator-related experiences that had happened at (or were related to) a landmark junction, most usually a food site or a waterhole. For example, one element extracted from experience would be: lions tend to visit waterholes at night. But during another experience an early human may have noticed that during the dry season, lions will even visit waterholes in the midday heat. Making such associations would have depended on identifying, associating and remembering the “lion-waterhole-night” and “lion-waterhole-dry season-day” elements of past experiences at a waterhole landmark junction. The associative pattern between predator-relevant elements of past events may have been retained in an unconscious image. On approach to the landmark place during waking hours, any momentary sight, sound or smell which may be indicative of a predator would trigger the unconscious image which portrayed the pattern. This would have given early humans an indication of the present risk based on past experiences at the landmark junction. During REM, we dreamed to survive!

Presented in a PowerPoint, the audience will interject with comments during the presentation and ask questions, or challenge points at the end. The dreamer is the ultimate authority on meaning, because meaning lies in the associations made between elements of past experiences.

Imagery Rehearsal Therapy in a Telephone Counseling Setting

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Despite the fact that only few nightmare sufferers seek help, the interest in nightmare-therapy options has recently been shown to be very high. A highly effective intervention for nightmares is Imagery Rehearsal Therapy (IRT), which has been tested in personal and internet-based settings, but not yet in a telephone setting. The current study investigates the effectiveness of telephone counseling, which covers information on the etiology and treatment of nightmares, as well as the execution of a short version of the IRT. After an eight-week period, the participants' nightmare frequency and nightmare distress are re-assessed. In my talk I will present preceding studies, the procedure of the telephone counseling and provide preliminary results.

Thought Suppression, Psychological Well-Being, and Nightmare Frequency/Distress

Josie Malinowski

London, UK

Does thought suppression moderate the relationship between psychological well-being and nightmare frequency/distress? Individuals with low levels of psychological well-being, characterised by depression and anxiety, have more nightmares and bad dreams than others, feel more distress about the nightmares that they have, and dream more of their unpleasant memories from waking life (Blagrove, Farmer, & Williams, 2004; Malinowski, 2017). Suppressing unpleasant waking thoughts has a “rebound” effect on dreams (Wegner et al., 2004), and people who tend to suppress their thoughts also tend to dream of their unpleasant waking-life experiences (Malinowski, 2017), illustrating that the strategies we employ to try to deal with unpleasant memories and thoughts have a knock-on effect on dreams. However, to-date there has been no research investigating whether these cognitive strategies moderate the relationship between psychological well-being and experiencing nightmares. If suppressing unpleasant thoughts leads to a rebound effect in dreams, it may be that this increases the chances of people with already low levels of psychological well-being of having nightmares, which cause distress and therefore further affect waking mood. If this negative moderating relationship is found, the results will lend support to thought acceptance-based (as opposed to thought suppression) therapies for depression and anxiety. Therefore, the aim of the present study is to investigate this potential moderating relationship. Participants between the age of 18 and 25 living, studying, and/or working in East London completed a questionnaire that measured their psychological well-being, their trait thought suppression, and their nightmare frequency and distress. Results from the moderation analysis will be presented.

Contents of Dreams in Parkinson's Disease

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The present study investigates the relationship between Parkinson's disease (PD), REM sleep behavior disorder (RBD) and dream contents, within a population aged 50 to 90 years. We analysed dreams content in a large sample of PD patient and controls (204 subjects, mean age = 69.02). Gender differences and continuity hypothesis between dreams and diurnal life have been studied. Since its initial stage, Parkinson's Disease has been frequently associated with sleep disorders (in particular RBD). To perform an analysis of dream characteristics of PD patient the Hall & Van de Castle (HVdC) coding system (1966) has been applied to the narratives collected. In addition, the Typical Dreams Questionnaire (TDQ) was compiled by all the subjects. A consecutive series of idiopathic PD Italian mother-tongue patients were prospectively observed from May until October 2016 (80 subjects, 50 males and 30 females, mean

age = 70.66). Patients with a Mini-Mental State Examination score of 24 or below were excluded. Patients were assessed with the Unified Parkinson's Disease Rating Scale part III (in ON). Type, daily dosage of medications and demographic information were collected. The control sample (124 subjects, 77 males and 47 females, mean age = 67.97) was of Italian nationality, able to remember dreams, with an absence of diagnosis of PD and of cognitive impairment. The Most Recent Dream and Episode methods were used to collect dreams and waking narratives. Subsequently, the HVdC coding system was applied to all the narratives. Furthermore, the TDQ was administered both to PD patients and control sample. PD patients (vs control sample) reported more physical aggression in dreams (93% vs 44%), and more dreams with at least one aggressive content (20% vs 7%). Similarly, analyses conducted with the HVdC system in other studies showed greater physical aggressiveness in PD patients.

However, some innovative findings of PD patients' dreams (vs control group), not previously found by any study, were related to higher presence of theme of "success" and of the dreamer involved in a success situation (63% vs 23%), and a lower frequency of indoor settings (50% vs 71%). No significant differences were found in dreams' reports between patients with and without probable RBD. Regarding gender differences in PD patients' dreams, women (vs men) reported more familiar setting (100% vs 76%). Conversely, gender differences in the control sample showed that women (vs men) reported more indoor settings (91% vs 57%) and more bodily misfortunes (88% vs 23%), and men reported more dreams with at least one theme of failure (17% vs 2%) or characterized by negative emotions (71% vs 42%) or effort (24% vs 6%). PD patients seemed to dream more threats and consequences of success, while healthy subjects showed a greater number of aggressive phenomena and successes in daytime life. This manifestation could be a form of compensation: circumstances of success, that are hardly experienced by PD patients in daytime life, are at least dreamed; on the contrary, the need for dream aggressiveness and consequent successes would be less present in a healthy sample, which more frequently faces this situation in everyday life. Finally, the administration of the TDQ highlighted a higher incidence of nightmares for the PD subgroup, in particular a higher presence of themes of "falling" and "being chased or pursued".

Partially Distinct Brain Correlates for Nightmare Distress and Disturbed Dreaming Frequency

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Nightmares are associated with psychopathology symptoms and emotional dysregulation. The neurophysiological correlates of nightmares are largely unknown, but some research suggests that nightmare distress (NMD), a variable strongly associated with psychopathology, is negatively correlated with brain activity in frontal regions (medial prefrontal cortex and anterior cingulate cortex; see Marquis et al., 2017; 2018). Other findings suggest that the neuro-

physiological correlates of nightmare frequency overlap substantially those of NMD (see Marquis et al., 2018) even though nightmare frequency and NMD are only moderately correlated. No imaging studies have used both variables in the same statistical model. Such analyses could be particularly relevant for a neurocognitive model of nightmares (e.g. Nielsen & Levin, 2007) that considers nightmare frequency and distress to be interacting factors. As part of a brain imaging study of frequent nightmare recallers, we investigated if retrospective estimates of disturbed dream frequency (retroDD; includes nightmares and bad dreams) and NMD had unique brain correlates.

Methods: We used high resolution 99m-Tc-ECD SPECT imaging to assess regional cerebral blood flow (rCBF) in 20 frequent NM sufferers (NM: 25.3±4.4 yrs (17 W)) during the viewing of negative pictures from the International Affective Picture System (IAPS). We included Nightmare Distress Questionnaire (NMDQ) scores and weekly retroDD (obtained from screening interview) separately, using the other measure as covariate; then we assessed both as independent variables in a multiple regression model with rCBF as a dependent variable. We used a significance threshold of $p=100$.

Results: Correlations between NMD and rCBF were reported elsewhere (see Marquis et al., 2017; 2018). Significant negative correlations were observed between retroDD and rCBF in bilateral anterior cingulate cortex ($t = 4.61$ and 3.41), left medial frontal gyrus ($t = 4.33$), bilateral inferior frontal gyrus ($t = 3.62$ and 4.22), left middle frontal gyrus ($t = 7.20$), right superior frontal gyrus ($t = 3.54$), left putamen ($t = 3.55$) and insula ($t = 3.44$). There were positive correlations in one cluster comprising the right inferior frontal gyrus ($t=5.35$ and 3.63) and right superior temporal gyrus ($t = 4.26$). When both variables were entered together, NMD was negatively correlated with rCBF in right superior temporal gyrus ($t = 5.50$), postcentral gyrus ($t = 4.23$), medial frontal gyrus ($t = 4.01$), insula ($t = 3.33$) and putamen ($t = 4.20$) whereas retroDD was negatively correlated with rCBF in left medial frontal gyrus ($t = 3.95$), inferior frontal gyrus ($t = 3.54$), middle frontal gyrus ($t = 7.29$) and precentral gyrus ($t = 4.12$). retroDD was also positively correlated with rCBF in right superior temporal gyrus ($t = 4.84$) and middle temporal pole ($t = 4.71$).

Conclusion: Findings show partially shared brain correlates for NMD and retroDD, but also a lateralization pattern that suggests some brain correlates specific to each variable. When combined in the multiple regression model, NMD correlated exclusively with right-hemisphere regions, and retroDD primarily with left-hemisphere regions. We discuss the theoretical significance of this lateralization pattern.

When a Dream Turns into a Nightmare: Due to Negative Contents or to Negative Appraisal?

Jonas Mathes

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According to the dream diary study, frequent nightmares can be predicted by aversive dream contents and also by a negative appraisal of dream contents during a dream. e) research f) Various studies showed that negative dream-con-

tents outweigh positive ones (Hall & Van de Castle, 1966; Snyder, 1970; Strauch & Meier, 1996). Although, Schredl & Doll (1998) and Röver & Schredl (2017) were able to show that positive dream emotions were rated less intensive by external raters than by the dreamers themselves. This may lead to the question that dream emotions may not be necessarily be consistent with dream contents and how far the subjective dream experience is influencing dream emotions. A dream containing aversive contents does not necessarily have to be a nightmare. We hypothesize that nightmares are rather caused by a more negative appraisal of aversive dream contents than by the dream contents itself.

Method. N = 99 Participants kept a dream diary during 28 days, including persons with frequent nightmares and a control group without nightmares. Out of this, overall N = 1047 dream reports were carried out. Dream content was analyzed by the dreamers themselves and as well as by four external raters regarding violent dream contents and emotions during the dream. Results and Discussion. Results show that positive and negative emotions in dreams may not exactly consistent with their pure contents; external raters rated dream reports significantly less positive than they were experienced by the dreamers. Both violent dream contents and high negative emotions are influencing frequent nightmares for the participants. Furthermore, differences between self-rated emotions and external rated emotions were not significant while regarding dream reports and nightmare reports alone, but a significant interaction effect could be found between self-rated dream emotions and nightmare frequency. Experiencing a dream as a nightmare is not solely determined by aversive dream content, but also by negative appraisal of the contents during the dream.

References

- Hall, C. S., & Van de Castle, R. L. (1966). *The content analysis of dreams*. New York, NY: Appleton-Century-Crofts.
- Röver, S. A. & Schredl, M. (2017). Measuring emotions in dreams: Effects of dream length and personality. *International Journal of Dream Research* Volume 10, No. 1, 65–68.
- Schredl, M., & Doll, E. (1998). Emotions in Diary Dreams. *Consciousness and Cognition* 7(4), 634–646.
- Snyder, F. (1970). The phenomenology of dreaming. In Madow, L., Snow, L. H. (Eds.), *The psychodynamic implications of the physiological studies on dreams*. Springfield, IL: Thomas. Pp. 124–151.
- Strauch, I., & Meier, B. (1996). *In search of dreams: results of experimental dream research*. Albany: State University of New York Press.

Dreaming in Auschwitz: An Interdisciplinary Approach

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In 1973, psychiatrists from the Kraków Medical Academy sent out to former prisoners of Auschwitz camp a questionnaire about dreams. 147 people replied. Their responses constitute a trove of immensely rich and diverse material, which has inspired multiple interpretations. The former Auschwitz inmates described the dreams they had during the Nazi occupation, in prisons, in the camp, after liberation, as well as later in life. They reported nightmares and enchanting visions. They wrote about their attitude towards dreams. They gave accounts of the daily camp ritual of dream sharing and interpreting. In my presentation, I will summarize the

final results of the research on those reports, conducted by my team (consisting of Paulo Endo, Katja Valli, Marco Zanasi and myself) from an interdisciplinary perspective. I will try to demonstrate how this research can contribute to the development of dream studies, and how it challenges some one-sided approaches. The life in a Nazi concentration camp was an extreme experience for the prisoners, hardly comparable to anything in the history of humankind. Their trauma was enormous, their behaviors could not be comprehended in relation to any common “norms” or expectations, their cultural identity was destroyed and re-shaped in the completely new social situation in the camp. So their dreams were also far from “normal” patterns. Therefore, the unique, complex and diverse collection of testimonies could be understood and explained only when observed from many points of view at the same time. We investigated the dreams quantitatively and qualitatively. We referred to countless dream theories. We analyzed the reports’ psychological, anthropological, linguistic, textual and even artistic aspects. All these aspects allowed us to formulate different narratives, different stories about the dreams and the dreamers – sometimes contradictory to each other. And the contradictions turned out to be the most important and most significant revelation of the unstable and nonobvious nature of the Auschwitz inmates’ dream experiences. For instance – quantitative dream content analyses, based on three different methods (Hall/Van de Castle coding system, Textual Analysis and a system used in the Social Simulation Dream Theory), brought very similar findings, however there appeared some small differences which enriched the final conclusions, rather than making them less reliable. The differences did not allow us to decide which method is “the best”. On the contrary, they supported the conviction that each method sheds light on some specific traits of the dreams, and that contradictory characteristics can be attributed to the same dreams, depending on the general purpose of the research. Qualitative analyses revealed yet other features of the Auschwitz dreams, and sometimes the inmates’ reports supported competing dream theories (for example Hartmann’s “quasi-therapeutic” effects of nightmares and Lavie and Kaminer’s adaptive repression of nightmares). So, the main goal of my presentation will be to prove that an “absolute truth” about dreams and dreaming does not exist, that each theory is valid only in a restricted context, and that going beyond one particular method, theory or discipline should be strongly recommended in the field of dream studies.

Kinesthetic Dreams and Cued Reactivation: Investigating Memory Replays of a VR Flying Task

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Spontaneous offline reactivation of newly encoded memories is a central process by which sleep contributes to memory consolidation. A growing body of research has shown that these neural replays could also be artificially triggered by replaying an auditory stimulus associated with prior learning, known as targeted memory reactivation (TMR). Our study aims to enhance procedural learning of a VR-flying task with

TMR, specifically by presenting task-associated tones during rapid-eye movement (REM) or non-REM (NREM) sleep, and to assess whether dream content is influenced by it.

Neural replays of newly encoded memories occur spontaneously during both REM (Poe et al., 2000) and NREM (Wilson & McNaughton, 1994) sleep and are thought to contribute to memory consolidation. It has also been suggested that dreaming plays a role in memory, although it remains unclear whether dream 'replays' of new memories are beneficial for their consolidation. Studies have shown that reinstating memory-associated information during sleep produces memory reactivation in humans and enhance memory consolidation (review of TMR in Schouten et al., 2016). The beneficial effects of TMR have been validated for different types of memories, including procedural memory (i.e. implicit skill learning; Antony et al., 2012). However, it is still unknown whether TMR is efficient on whole-body procedural learning, whether it influences dream content toward memory replay and whether REM or NREM sleep is more centrally implicated in procedural memory consolidation.

Context: I will review the studies that have used a TMR protocol to enhance procedural memories and discuss the differential roles of NREM and REM sleep in motor learning. I will also discuss the hypothetical role of dreaming in memory consolidation by reviewing the few studies that have shown an association between dream 'replays' and task improvement.

A total of 59 healthy participants (23.71 ± 4.20 yrs old; 34 F) took part in a procedural VR task prior to and following a polysomnographically-recorded morning nap, during which the tones were either replayed in NREM sleep (N=19; Stim-NREM), in REM sleep (N=19; Stim-REM) or were absent (N=20; Control). The task involved flying through a circuit of rings in a natural landscape as precisely and quickly as possible, to engage vestibular and motor systems. Performance was calculated as the number of successfully reached rings, divided by the time to complete the circuit. Participants were awoken in REM sleep and were asked to report their dreams. Incorporation of the VR task in dream content was assessed independently by two judges blind to the experimental condition.

Results: A mixed-design ANOVA revealed a significant interaction between time (pre-nap, post-nap) and condition (Stim-NREM, Stim-REM, Control), $F(2,56)=9.27$, $p=.000$, $p2=0.249$, with a better post-nap performance for the Stim-REM group compared with controls ($p=.033$). The auditory stimulation in REM sleep did not influence dream content on any measure. However, across all groups, dreams incorporating kinesthetic elements of the VR task (e.g. flying, floating, driving fast) were associated with higher improvement compared with no incorporation ($p=.047$), while dreaming about static visual elements of the task (i.e. landscapes, rings) was not ($p=.898$).

Implications of this study: These results suggest that TMR during REM sleep could influence sensorimotor skill performance. Independently, dreaming about proprioceptive elements of the procedural task is also associated with larger improvement in performance. Findings may help understand the relationship between dreaming and procedural memory consolidation processes and the development of new sleep-based methods that use VR to optimize and rehabilitate motor memory.

Controlling My Dream Body: The Experience of Agency in Sleep

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There is much disagreement about the nature of phenomenal experience during dreams. While dreaming is something we have all experienced, what it is like to dream is still contested. One concern is our ability to accurately introspect and report our experiences, and our inability to report dreams while they are occurring. The common belief is that to dream is to hallucinate; however, perhaps after waking we simply believe we have hallucinated... dreaming may instead simply be imagination. Or perhaps dreaming is an illusion of waking bodily perception. Dream reports contain indirect evidence about what exactly it is like to dream. One such indicator is the sense of agency (SoA). Looking at how we feel in or out of control in a dream can fill in the gaps of our knowledge. Dream SoA is particularly interesting, as dreams display many agentive indicators such as achieving goals and feelings of control over bodily movement, as well as delusion-like experience and passivity. I argue that reports of SoA during dreams are consistent with a pluralistic approach: dream phenomenology involves imagination, illusion and hallucination. Theorists' preference for a simple definition of dreaming may lead research groups to focus on only a subset of dream experience. However, by analysing holistic, narrator and comparative approaches to SoA in dreams, I will argue that dream experience is not reducible to a simplistic definition. My approach is primarily philosophical but incorporates analysis of cognitive scientific data. This is a substantial theory.

Following an overview of dream research in relation to theories of the sense of agency, this talk will focus on the similarities and differences between dreaming and waking experience in this regard. I will then outline how this research can contribute to the debate about dream phenomenology and present the pluralistic approach of dream analysis. This approach suggests that to dream is both to imagine and to hallucinate, and may involve in-between states.

Predicting the Affective Tone of Everyday Dreams: A Prospective Online Study

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Is it possible to have an idea, in advance, of how our dreams will leave us feeling on a specific night? Despite decades of advances in dream research, relatively little is still known about how dreams are formed and what factors most influence their content and emotional tone. One of the most studied conceptualizations of dream content is the continuity hypothesis of dreaming (Domhoff, 1996), which states that dreams reflect the individual's waking thoughts and concerns. In line with this view, a model developed by Levin and Nielsen (2009) suggests that affect load – daily variations in emotional stress – is one key factor that contributes to the experience of negatively-toned dream content. While stressful experiences have long been known to im-

fact people's train of thought, right up to their transition into sleep, being peacefully minded can exert a positive influence on dream content (Sikka, Pesonen & Revonsuo, 2018). That said, the way and extent to which a person responds to affect load is also modulated by trait factors, including anxiety-prone personality and early experiences with highly stressful events. Thus, predicting the occurrence of negatively and positively-toned dreams depends on an interplay between both state (e.g., daily stress and emotional reactions) as well as trait variables (e.g., personality dispositions). The aim of the present study was thus to investigate state as well as trait factors as predictors of the emotional content of dreams.

Procedures: Qualtrics Research Suite, a powerful online software designed for research purposes, was used to collect responses to questionnaires as well as daily reports on waking experiences involving stress, salient emotions, as well as dream recall. Participants were required first to complete a set of questionnaires, including a Sleep and Dream Questionnaire, the State-Trait Anxiety Inventory, the Boundary Questionnaire, and the Childhood and Adolescence Experiences Questionnaire. These measures were used to assess the participants' general dream and sleep profiles, levels of trait anxiety, psychological boundaries, and early experiences with traumatic events, respectively. Participants then completed a series of morning and evening questionnaires on a daily basis for three consecutive weeks. These instruments assessed morning dream recall and, prior to bedtime, an account of stressors and emotions experienced during the day. The study is the first to assess day-to-day variations in stress (as opposed to retrospective or weekly accounts of stress) paired with content characteristics of the following night's dream report over a multi-week period. Since a majority of studies in this area have focused uniquely on negatively-toned dreams (e.g., bad dreams and nightmares), our study used a bipolar scale of dream emotional valence to encompass a broader range of affect in everyday dreams.

Results: Data were analyzed using hierarchical linear modeling (HLM), where affect load measured prior to bedtime (state variable) is underpinned by the participants' dispositional measures (trait variables) in predicting the occurrence of negatively and positively-toned dream content. To ensure the best model fit, all measured predictors were examined in order to identify the ones that explained the greatest variation in participants' evaluations of dream emotional valence. Our different statistical models yielded interesting results that challenge previous findings in the literature. The differential impact of our key variables on everyday dream content is discussed, as are the implications of these findings for models of dream content.

Comparing Imagery-Based Nightmare Treatments: A Randomized Controlled Trial

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The study compared two established imagery-based treatments for nightmares – confrontation with nightmare content and rescripting of nightmare content (IRT) – with an imagery training not directed at nightmares (pleasant imagery). All

three techniques proved capable of reducing nightmare frequency and nightmare distress in participants who learned one technique in a 90-minute session and practiced it for four weeks. e) research f) Nightmares are defined as “extended, extremely dysphoric and well-remembered dreams that usually involve efforts to avoid threats to survival, security, or physical integrity” (American Psychiatric Association, 2013, p. 404). Several treatments for nightmares have been developed. Imagery Rehearsal Therapy (Krakow & Zadra, 2006) has received most empirical support and is recommended for PTSD-associated nightmares (Morgenthaler et al., 2018), confrontation based treatments have also proven to be effective (ibid.). The recommendations are mainly based on trials that compared one treatment to a waiting list condition. Little is known about the effectiveness of these techniques compared to one another or to other active treatments. The study was designed to address these questions.

Method. Ninety-six participants were randomized to one of three study conditions: Imagery Rehearsal Treatment, confrontation, or pleasant imagery. They learned the respective technique in a 90-minute one-to-one session and were asked to train it for four weeks. Nightmare frequency, nightmare distress and nightmare effects on daily life were measured before and after the treatment and in an eight weeks follow-up. Several potential moderators were judged for their influence on treatment gains. **Results.** Nightmare frequency, nightmare distress, and nightmare effects were all significantly lower after treatment than before and even lower at follow-up. There were no group differences or interactions (differences in change between groups). Baseline sleep quality was the only moderator that influenced treatment gains (lower sleep quality resulted in bigger effects). **Discussion.** Nightmares can effectively be treated with a short intervention. The effect sizes in this study were comparable to those found in a meta-analysis (Hansen, Höfling, Kröner-Borowik, Stangier, & Steil, 2013). We found little differences in the effects of IRT, confrontation and an active control group. Focusing more on common ground than on differences in treatments might help enhance our understanding of the working mechanisms in nightmare treatments.

References

- American Psychiatric Association (Ed.). (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.
- Hansen, K., Höfling, V., Kröner-Borowik, T., Stangier, U., & Steil, R. (2013). Efficacy of psychological interventions aiming to reduce chronic nightmares: a meta-analysis. *Clinical Psychology Review*, 33(1), 146–155. <https://doi.org/10.1016/j.cpr.2012.10.012>
- Krakow, B., & Zadra, A. (2006). Clinical management of chronic nightmares: imagery rehearsal therapy. *Behavioral Sleep Medicine*, 4(1), 45–70.
- Morgenthaler, T. I., Auerbach, S., Casey, K. R., Kristo, D., Maganti, R., Ramar, K., . . . Kartje, R. (2018). Position Paper for the Treatment of Nightmare Disorder in Adults: An American Academy of Sleep Medicine Position Paper. *Journal of Clinical Sleep Medicine: Official Publication of the American Academy of Sleep Medicine*, 14(6), 1041–1055. <https://doi.org/10.5664/jcsm.7178>

Who Keeps a Dream Journal? Socio-demographic and Personality Factors

Michael Schredl

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Dream journals are not only a source of inspiration for the dreamer herself/himself but also offer very interesting opportunities for dream research, e.g., analyzing long-term effects of romantic relationships on the dreamer even years after separation (Domhoff, 2018; Schredl, 2018). Hartmann and Brezler (2008) were able to collect 10 dreams before 9/11 and 10 dreams after 9/11 from 44 dream journalists recording their dreams within this time period. Another researcher (Merei, 1994) studied the effect of several years' imprisonment on dream content, a topic that never could be studied experimentally. Despite the use of long dream series, research regarding the question "Who keeps a dream journal?" are scarce. The present study looked into the relationship between the frequency of recording dreams, socio-demographic, and personality factors.

Overall, 2492 persons (1437 women, 1055 men) completed an online survey between March 23, 2015 and April 8, 2015. The mean age of the sample was 47.75 ± 14.41 years (range: 17 to 93 years). The MADRE questionnaire included questions about dream recall frequency, dream recording frequency, nightmare frequency, and attitude towards dreams (Schredl, Berres, Klingauf, Schellhaas, & Görizt, 2014). In addition, the German 30-item version of the Big Five Personality questionnaire was presented. Forty-nine participants (2%) recorded their dreams once a week or more often. About 83% of the participants stated that they never recorded dreams, whereas the rest recorded dreams on and off. The regression analysis indicated that frequency of recording dreams was related to younger age, high dream recall frequency, neuroticism, openness to experience, and conscientiousness. The second analysis included the sum score of a 6-item attitude towards dreams scale that was strongly related to the frequency of recording dreams. The most important factor was then conscientiousness, i.e., persons with low conscientiousness were more likely to record their dreams. There was also a small but significant effect of education (high education was associated with higher dream recording frequencies).

References

- Domhoff, G. W. (2018). *The emergence of dreaming: Mind-wandering, embodied simulation, and the default network*. New York: Oxford University Press.
- Hartmann, E., & Brezler, T. (2008). A systematic change in dreams after 9/11/01. *Sleep*, 31, 213-218.
- Merei, F. (1994). Social relationships in manifest dream content. *Journal of Russian and East European Psychology*, 32, 46-68.
- Schredl, M. (2018). Reminiscences of love: Former romantic partners in dreams. *International Journal of Dream Research*, 11(1), 69-73.
- Schredl, M., Berres, S., Klingauf, A., Schellhaas, S., & Görizt, A. S. (2014). The Mannheim Dream questionnaire (MADRE): Retest reliability, age and gender effects. *International Journal of Dream Research*, 7, 141-147.

Nightmares and stress: A Longitudinal Study

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In the longitudinal study over four-years, current nightmare frequency was correlated with current stress but also to a considerable extent by previous nightmare frequency. Nightmare frequency declined slightly over the study's period. e) research f) Nightmares are defined as extended, extremely dysphoric, and well-remembered dreams that usually involve threat to survival, security, or physical integrity (American Academy of Sleep Medicine, 2014). For explaining nightmare occurrence, a diathesis-stress model is widely used (Carr & Nielsen, 2017). In an adult sample (age mean: 45.27 ± 13.99 yrs.) nightmare frequency dropped slightly over a three-year period but the measures at the measurement points were strongly correlated ($r = .616$), showing considerable stability in nightmare frequency reflecting the trait aspect (Schredl & Görizt, 2015). Longitudinal studies investigating the question how strong nightmares are affected by current stressors and/or by previously measured

nightmare frequency have not yet been carried out. Method. 406 pregnant women participated in the study. Their mean age was 31.43 ± 5.08 yrs. (range: 17 to 44 yrs.). At the T3 (6 month after giving birth), 357 women participated and completed the questionnaires, and 302 women were tested at T4 (3½ years after giving birth). The participants completed a dream recall frequency scale, a nightmare frequency scale (Schredl, Berres, Klingauf, Schellhaas, & Görizt, 2014) and several stress questionnaires at each measurement point. Results and Discussion. Despite the major life changes (giving birth, raising a small child), nightmare frequency is quite stable over a time of four years. This is the first longitudinal study showing that current nightmare frequency is affected by a composite stress/psychopathology factor and, to a larger extent, previously measured nightmare frequency indicating a trait aspect.

References

- American Academy of Sleep Medicine. (2014). *The international classification of sleep disorders. (ICSD-3)*. Darien, IL: AASM.
- Carr, M., & Nielsen, T. (2017). A novel Differential Susceptibility framework for the study of nightmares: Evidence for trait sensory processing sensitivity. *Clinical Psychology Review*, 58, 86-96.
- Schredl, M., Berres, S., Klingauf, A., Schellhaas, S., & Görizt, A. S. (2014). The Mannheim Dream questionnaire (MADRE): Retest reliability, age and gender effects. *International Journal of Dream Research*, 7, 141-147.
- Schredl, M., & Görizt, A. S. (2015). Changes in dream recall frequency, nightmare frequency, and lucid dream frequency over a 3-year period. *Dreaming*, 25(2), 81-87.

Aggression, Friendliness, Sexual, and Cooccurrence Networks In Dreams of an Adolescent Girl

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We describe systematic appearances and interactions of people in dreams of an adolescent girl. Using the Hall/Van De Castle coding system, we constructed social networks for characters appearing together in dreams, and for their aggressive, friendly and sexual interactions. Systematic properties are manifest in the dream social networks.

People do not pop into our dreams at random. We dream of some people more often than others. Some people occur together in our dreams and some do not. The characters in dreams often arise from our memory of people and their relations. Our memory, in turn, is formed from waking life relations with people. It is reasonable to expect that regularities in waking life relations would leave traces in dreams. Waking life relations with people can be represented in social networks, which have been studied intently in recent years. Many systematic properties of social networks have been found (Newman, 2003). For example, pairs of seemingly unrelated people are often joined by short paths of acquaintances, as in the popular phrase “six degrees of separation”. Characters in dreams are related in various ways that can be represented in social networks. We looked for systematic properties in the social networks of dream characters. The dreams we studied are of an adolescent girl Bea (a pseudonym), 223 from high school and 63 from college. They were downloaded from DreamBank.net, a website established by Schneider and Domhoff (2017). The characters who appear in the dreams were coded with the system of Hall and Van De Castle (1966), as were social interactions that were aggressive, friendly and sexual. DreamBank provided codes for the high school dreams and we coded the college dreams. Studies of waking life social networks often link two people if they are at an event together. One way we made dream social networks was to link two characters if they are in a dream together. One such network was for high school dreams and one for college. We found both to have properties of waking life social networks. In particular, pairs of characters tended to be joined by short paths. Another way to make a social network is to join two people if they have a social interaction. We made three kinds of such social networks, for aggressive, friendly and sexual interactions of characters in dreams. We found these networks to have a radial form, similar to the form of networks of characters interacting in fictional stories. We also analyzed frequencies with which characters appear in dreams. In waking life, frequencies of phone calls, emails and so on are not evenly distributed, but often have a probability distribution called the Zipf-Mandelbrot Law. We found that in Bea’s dreams, character frequencies follow this law, both in high school and in college.

References

- Hall, C. S., & Van De Castle, R. L. (1966). *Content analysis of dreams*. NY: Appleton-Century-Crofts.
- Newman, M. E. J. (2003). The structure and function of complex networks. *SIAM Review*, 45, 167-256.
- Schneider, A., & Domhoff, G. W. (2017). *The Quantitative Study of Dreams*. <http://www.dreamresearch.net/>

Automatic Content Analysis of Dreams: Evidence for the Continuity Hypothesis

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The Linguistic Inventory and Word Count (LIWC), developed by Pennebaker, Boyd, Jordan, and Blackburn (2015), has been widely used in psychological studies. We tested consistencies between waking life and dreams in terms of gender differences, aging, and differences between the sighted

and the blind with word frequencies from Linguistic Inquiry and Word Count. Our study provides a stringent methodology for studying dream reports. We find evidence for continuity and regularity in dreams.

According to the continuity hypothesis, dreams reflect the dreamer’s waking life. Some studies analyzed the gender difference of word usage in dream reports (e.g., Bulkeley & Domhoff, 2010). Nevertheless, most of these studies are based on written language style, and rare studies have analyzed the relationship between gender differences in waking life and word usage in dream reports. For example, males seem to be more analytic, to have better spatial ability, to be more reward-oriented, to be more likely to take risks (e.g., Charness & Gneezy, 2012), to have more sexual fantasies, and to be more likely to be physically aroused by their sexual thoughts (e.g., Ellis & Symons, 1990). By contrast, women tend to have higher levels of anxiety (World Health Organization, 2002), to be more emotional, and to devote more cognition to family and home issues (Sharma, Chakrabarti, & Grover, 2016). We first hypothesized that these differences get reflected in dreams. Aging effect theory postulates that older people tend to be less negative than younger people. This effect has been found in waking life by word usage analysis, showing that people tend to be less negative with increase of age (e.g., Pennebaker & Stone, 2003). This has rarely been investigated for dreams. Our second hypothesis is that the frequency of words about negative emotion in dream reports decrease with the increase of people’s age. In LIWC, the category of negative emotion includes three sub-categories: anxiety, sadness, and anger. We will further test the change of the frequencies of these subcategories over time. For sighted people, dreaming is mostly a visual experience, and some portions have auditory and tactual sensations (e.g., Snyder, 1970). Blind people who were sightless since birth or very early childhood seem to have no visual perceptions in dreams and rely on tactual sensory references a lot (e.g., Hurovitz, Dunn, Domhoff, & Fiss, 1999). Studies also found more locomotion/transportation associated with misfortune in blind people’s dreams than those in dreams by sighted people (e.g., Hurovitz, et al., 1999). Following these, our third hypothesis is that blind people use fewer visual words, more tactile words, more auditory words, fewer motion words and fewer spatial words than sighted people in dream reports. We also hypothesize that the nature of blindness (congenital or adventitious blindness) and degree of blindness (total blindness, partial blindness, or able to perceive very bright light) would make differences in the frequencies of perception words.

When a text is put into LIWC, it automatically analyzes and tabulates the frequencies of word usage for about 100 categories, e.g., emotion, grammar, and social processes. As a powerful automatic content analysis tool, LIWC has been widely used, although though not much in dream studies. Using a large collection of dream reports, we tested the above hypotheses with output of word frequency from LIWC 2015. Our study provides a stringent methodology for studying dream reports. We find evidence for continuity and regularity in dreams.

Experiences of Social Sharing of Nightmares: A Qualitative Study

Lucie Klůzová Kráčmarová, Kateřina Surovcová (Presenter), and Anna Ohnisková

Olomouc, Czech Republic

Dreams are an intimate experience of an individual, which can be shared with others. In previous research, it was found that people share their dreams in order to entertain others or to be closer to someone (Olsen, Schredl, Carlsson, 2013). Dreams are often shared with partners or friends. It was found that one of the main predictors of social sharing is an emotional intensity of the dream (Curci, Rimé, 2008). Sharing of the negative dreams may help an individual to understand the feelings of the dreamer (Wax, 2004) that may not be easily accessible in everyday communication. However, a qualitative study exploring the reasons, benefits or issues related to the social sharing of nightmares was not previously explored. The goal of the current study was to explore reasons, benefits and issues related to the social sharing of nightmares. To explore these issues, a secondary analysis of a qualitative study based on narrative interviews about experiences of nightmare sufferers was conducted.

Participants were 34 individuals suffering from frequent nightmares (at least one nightmare per two weeks) in the age range 20-71 years from the Czech Republic. The interviews were transcribed verbatim. The data were coded in NVivo 12 software by three researchers. A thematic analysis was conducted to find the most important topics related to the social sharing of nightmares. It was found that sharing of the dreams may help nightmare sufferers to cope with the distressing dreams. However, except for the support from the others, the nightmare sufferers also got inappropriate reactions from their friends, partners or parents. Examples of good and bad experiences are presented.

Posttraumatic Symptoms and Dream Content in Auschwitz Concentration Camp Survivors

Katja Valli and Monica Bergman

Turku, Finland

Exposure to military conflicts has been shown to systematically induce posttraumatic symptoms and nightmares in civilians, and in many Second World War survivors these symptoms have persisted for decades (e.g., Glaesmer et al., 2010; Kuch & Cox, 1992; Sandman et al., 2013). However, content analytic studies on dreams of war survivors are sparse. This study investigates both posttraumatic symptoms and dream content in Polish Auschwitz concentration camp survivors.

Methods: In 1973, an open-ended questionnaire was sent to 561 former prisoners of the Auschwitz-Birkenau concentration camp by Dr. Stanisław Kłodzki, an editor of the *Auschwitz Journal of Medicine* and a former inmate himself. The questionnaire addressed sleep patterns and dreams before, during, and after the war. Responses were available from 150 participants (105 men and 45 women), and at the time of answering the questionnaire the majority of them were 56-65 years old. From the response letters, translated from Polish into English in 2017, we first assessed how

many of the respondents reported posttraumatic symptoms (based on current DSM-5 PTSD criteria). Second, we identified all descriptions of recalled dream content (N = 632) from the responses. These were then analysed according to the main theme of the dream, and dream reports including sufficient detail for more thorough content analysis (N = 465) were further analysed for emotional tone and threat content.

Results: Over 90% of respondents reported PTSD symptoms, most often re-experiencing traumatic events either in the form of nightmares or intrusive thoughts. Avoidance behaviors (such as avoiding books and movies about the war) and hyperarousal (such as insomnia) were also commonly reported. In dream content, themes related to violence and death, the concentration camp, and to being chased or escaping were most common, followed by dreams of home, family and friends. On average, there were 0.85 threatening events per dream, most often realistic and life-threatening in nature, and involving physical aggression or being chased. When explicitly expressed emotional tone could be coded (53% of dreams), it was more often negative than positive. Conclusions: The majority of the survivors reported posttraumatic symptoms 30 years after liberation from Auschwitz. Recalled dreams were most often emotionally negative, and involved realistic, severe and aggressive threatening events.

Threat Simulation in Early and Late Night NREM and REM Sleep Dreams

Katja Valli (Shintami, S., & Tuominen, J.)

Turku, Finland

This study investigates the assumption of the threat simulation theory (Revonsuo, 2000) that to classify as the function of dreaming, threats should be frequently simulated in dreams across the night and in all sleep stages. Previous threat content analyses have typically utilized home dream diary reports, which mostly consist of late morning dreams (e.g., Revonsuo & Valli, 2000; Valli et al., 2007, 2008). In this study, an analysis of the frequency and nature of threatening events in early and late night Non-Rapid Eye Movement (NREM) and Rapid Eye Movement (REM) sleep dreams was conducted to investigate whether threats are equally frequent and qualitatively similar in all sleep stages, throughout the night.

Methods: The dream data were collected by the Department of Psychiatry of Harvard Medical School in the 1990s from 16 undergraduate students, with the 'Nightcap' which enables pre-programmed awakenings, and tracking of sleep stages and time spent asleep in the participant's own home (e.g. Stickgold, Malia, Fosse, Propper, & Hobson, 2001). To ensure a representative sample of dream reports for the purposes of this study, we selected dream reports from the original pool by controlling for the length of reports, sex of participant, and especially the time of reporting (early vs late night) and the ratio of NREM to REM dream reports from the same subject. The dream reports utilized in this study thus comprised a subsample of 232 dreams produced by 15 participants. The dream reports were content analysed by two independent raters utilizing the Dream Threat Scale (Revonsuo & Valli, 2000).

Results: The results of this study show threatening events to be present in both NREM and REM sleep dreams and across the night. The frequency of threatening events was higher in REM than in NREM dreams and in late night than in early night dreams. However, these perceived differences vanished when the word count of dream reports was controlled for, which suggests that the differences were mediated by report length. The nature of threats did not differ between NREM and REM, or between early and late night, dreams.

Conclusion: Given that threatening events are present in NREM and REM sleep dreams across the night, and their nature is not influenced by sleep stage or time of night, the prediction of the threat simulation theory that dreams are specialized in the simulation of threatening events gains support.

10. Posters

Experiencing in Dreams the Perspective and Emotions of Individuals Empathised with in Waking Life

Mark Blagrove

Swansea, UK

The cognitive deficiency view of dreams held that dreaming was not able to sustain complex cognition, such as meta-cognition and deliberating on decisions and making choices. The work of Kahan showed that even in non-lucid dreams such complex cognition is possible. We propose here a type of dream that shows complex emotional and social cognition that goes beyond, or augments the interaction of characters as described by Revonsuo, Valli and Tuominen's social simulation theory and Domhoff's theory of embodied enactment of waking life conceptualisations and concerns. This type of dream we term the empathy dream. In this type of dream, rather than the waking life concerns and experiences of the dreamer being enacted/simulated, the self-character in the dream experiences the emotions and perspective of wake life individuals other than the dreamer. Two examples of such empathy dreams are given. In the first one, titled "dream of unjust punishment", the dreamer has almost caused a serious accident and sees someone else being blamed for it and subject to brutal punishment. The dreamer does not step in to stop the punishment, out of fear of also being punished. The waking life context was the dreamer hearing of someone who had deflected blame onto another person, the dreamer was empathic in waking life as to what circumstances had led someone to falsely pass blame onto someone else. In the second dream, the dreamer realises another character is a psychopath and is very frightened, and intends to use a knife for self-protection. The waking life context was the dreamer hearing a radio news report on how many young people feel obliged to carry a knife due to the very dangerous gang related environment in which they live. The dreamer was empathic about the fearful circumstances that can lead some young people to carry knives. These empathy dreams involve the dreamer feeling the circumstances of empathised-with individuals from waking life. The self-character does not feel

empathy in the dream, instead the self-character has the characteristics of the person or group empathised with in waking life. Importantly, this is a very different phenomenon from a dream in which a dream character is depicted feeling empathy for another character. It is also different from the usual egotistical dream content, in which it is the environment, motivations and concerns of the dreamer that are depicted, rather than the life circumstances of an empathised person or group.

Comparing At-Home Sleep and Dream Report Measures in Cannabis Users and Non-Users

Ceri Bradshaw and Michelle Carr (Borcsok, R., Taylor, Matthew)

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This study aims to investigate if cannabis use has an impact on occurrence of dreams, and to utilise new, portable technology to take naturalistic sleep measures in participants' homes. The rationale for this study stems from evidence showing cannabis users have less REM sleep than non-cannabis users. It is hypothesised that cannabis users will report dreams less often and have less vivid dreams than non-cannabis users.

The study is a 2-group design, comparing questionnaire, behavioural and subjective measures between cannabis-using and non-using groups. We are collecting data from 20 participants aged 18-35. Participants first respond to four questionnaires: the Rutgers Marijuana Problem Index, 23 items rated on a 4-point scale to indicate how many times different problems have arisen in the last year due to the use of cannabis; the Pittsburgh Sleep Quality Index, a 9-item questionnaire which asks participants to respond on a 4-point Likert scale to questions regarding habitual sleep patterns and sleep disturbances; the State-Trait Anxiety Inventory-Trait form, a 20-item questionnaire that asks about general feelings of anxiety on a 4-point Likert scale; and the Everyday Memory Questionnaire, a 13-item questionnaire that asks about common memory problems in everyday life. Participants then are instructed in the 2-night sleep recording procedure. Sleep is measured using Zmax headbands (Hypnodyne Corp) which record EEG, EOG, and EMG, and can be used to detect sleep duration and sleep stages in participants at home. For two nights, participants fill out a short questionnaire assessing daily substance use prior to sleep, and then wear the headband for the night of sleep. Participants set alarms for 4 awakenings per night, and one final morning awakening. At each awakening, participants report their dream and rate the level of sensory vividness, emotional intensity, and bizarreness of their dream on a scale of 1-7. Variables of interest include sleep latency, duration, and efficiency, and REM latency, duration and efficiency as measured by Zmax. Dream measures of interest include dream recall frequency, average word count, and ratings of sensory, emotional and bizarre attributes of dreams. We will conduct comparisons of all variables between the two groups, and assess for mediating roles of any of the questionnaire measures on sleep and dream quality. The results have several implications. First, as medicinal cannabis use becomes more widespread, understanding the impact of cannabis on sleep is of primary importance.

Second, anecdotal reports suggest that cannabis may be effective for managing symptoms of PTSD; further research should empirically assess whether cannabis use may ameliorate post-traumatic nightmares.

Frontal Brain Activity and Subjective Arousal During Emotional Image Viewing in Nightmare Sufferers

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Swansea, West Glamorgan, UK

Nightmares can be defined as intensely negative dreams that awaken the dreamer and are associated with distress after awakening. About 5% of the population experience frequent nightmares, occurring more than once per week. At a neurocognitive level, nightmares are thought to reflect an executive deficit in regulating arousal (Levin & Nielsen, 2009). This claim was supported by our recent neuroimaging finding that nightmare participants showed decreased prefrontal cortex activity coupled with higher subjective arousal ratings during a negative picture viewing task (Marquis et al., 2019). The current study aims to replicate and expand on these findings by assessing changes in frontal oxyhemoglobin (oxyHB) during a negative and positive picture viewing task in a sample of nightmare sufferers (NM) and a non-nightmare control group (CTL).

We recruited 18 CTL subjects and 27 NM subjects aged 18-35 and assessed subjective emotional arousal during a negative and positive picture-viewing task, and measured changes in frontal cortical blood flow as measured by Near-Infrared Spectroscopy (NIRS). NM participants recalled at least 1 NM or 2 bad dreams per week, and CTL participants recalled at most 1 NM per month. In NIRS red light is emitted into the skull and cortex and collected at other points across the skull, thus non-invasively assessing cortical activity and blood oxygenation across the cortex. We used a 2x4 template of 4 emitters and 4 detectors on the forehead (Oxymon MkIII, Artinis Medical Systems) to measure concentration changes in oxyHB in the prefrontal cortex (PFC). Participants were instructed to observe a series of images and judge them on how emotionally arousing they found the image to be on a scale of 1-9 (1=not arousing, 9=highly arousing). Following the task, participants also completed a series of 5 questionnaires to assess general dream and bad dream recall frequencies, reactions to nightmares, lucid dream characteristics, attitudes towards dreaming, and general well-being. Finally, participants completed a 4-week daily at-home dream diary.

Participants reported their sleep schedule, dream recall, and answered 6 rating scales regarding dream emotionality each day. We will conduct between-group comparisons to assess differences in emotional arousal and cortical activity in response to negative and positive picture-viewing, and conduct correlational analyses to assess relationships between questionnaire measures, dream diary measures and emotional task measures. Overall, this study will allow us to better understand the profile of frequent nightmare sufferers and to assess how experiencing nightmares may relate to emotional reactivity more generally.

Pre-Sleep Cognitive Training and REM-sleep Stimulation in a Morning Lab Nap to Induce Lucid Dreams

Chris Edwards, Kristoffer Appel, Michelle Carr, Karen Konkoly, Remington Mallett, and Mark Blagrove

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Reliably inducing lucid dreams (where the dreamer is aware they are dreaming while asleep) is a necessary component to further research and applications of lucid dreaming. Previous experiments combining cognitive training and early morning sleep periods have been relatively successful in inducing at-home lucid dreams over periods of 1-week or more. Here, we attempt to induce lucid dreams in a single morning laboratory nap using a combination of methods. Methods: Participants came to the laboratory at 7:30 am or 11:00 am, and were given instruction in lucid dreaming while being hooked up to PSG. Prior to sleep, participants imagined becoming lucid and practiced signaling to the experimenter with 4 left-right eye movements. Then for twenty minutes the experimenter alternated playing audio or visual cues at approximate 1-minute intervals. The participant was instructed, each time they noticed a cue, to practice 'becoming lucid'--a mental state of critical self-awareness. Subsequently, participants were allowed two hours to nap, and the audio/visual cues were re-presented during REM sleep. A control group followed the same procedure but was not cued during sleep. Results: 54% of cued participants became lucid and were able to signal their lucidity with eye movements. An observable EOG signal in addition to a post-sleep report of lucidity qualifies these as Signal-Verified Lucid Dreams. 17% of control participants had Signal-Verified Lucid Dreams. Discussion: Overall, findings suggest lucid dreams can be efficiently elicited by a combination of pre-sleep training and audio/visual cueing during REM sleep. Of note, four successful participants had never before experienced a lucid dream, suggesting this protocol may work for inexperienced lucid dreamers. Additionally, several interesting cases emerged, such as conflicts between subjective reports and observed eye-signals, as well as different types of dream incorporation of the external cues.

The Student Initiative Sleep and Dream: How we do Sleep and Dream Research in an Autonomous Manner

Elena Gerhardt and Simone Anthes

Osnabrück, Germany

We are a group of 10 to 15 bachelor's as well as master's students. Most of us study Cognitive Science at the University of Osnabrück, and we keep an interdisciplinary dialogue with anyone who is interested in sleep and dream research as well as the clinical approaches. As an initiative, we successfully replicated an experiment to test a combined lucid dreaming induction technique. In our sleep laboratory we meet on a regular basis to share thoughts and to discuss specific sleep related topics (e.g. sleep disorders, sleep and memory or lucid dreaming). Organized as a student initiative, we are funded by the ASTA of the University of Osnabrück, which means that we have a small budget and we

can act in an autonomous manner – we engage our time and effort voluntarily dedicated to do research. In 2015 we moved to our first sleep laboratory, in collaboration with the Institute of Cognitive Science. Our sleep lab is equipped with a 10-20-EEG and a complete polysomnographic recording system, which was donated to us. We are planning further experiments: one concerned with a yogic breathing technique and in another one we want to quantify the (short term) effects of energy drink withdrawal on sleep behavior of heavy consumers. Some members collaborate with a senior sleep scientist to write their theses. We like to ask questions like: What purpose do our dreams have and how do we control them? How do sleep and dreams differ from other states of consciousness (e.g. meditation, psychosis, lucid dreaming)?

Two-Way Communication Between Dreamers and Experimenters

Karen Konkoly & Ken A. Paller

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Our recent work establishes real-time two-way communication between dreamers and experimenters. Experimenters use softly presented verbal stimuli to ask questions to participants during lucid dreams, and participants respond back via eye signals.

Retrospective dream reporting limits the ability to use scientific methods to explore dream experiences. To allow for a more rigorous analysis of dreams and their function, we propose that individuals can provide information in the midst of dream experiences. Research on targeted memory reactivation demonstrates that verbal stimuli can break the barrier of sleep and influence next-day performance. Further, LaBerge and colleagues in 1981 showed that eye signals can be used to communicate out from lucid dreams. We are combining these two techniques to establish two-way communication in lucid dreams, thereby opening the door for dream reporting and task assignment to dreamers, while their dreams are still ongoing. We induced lucid dreams with a method described in Carr et al. 2018, by associating cues with becoming critically aware of one's state. Once participants signalled lucidity, we played spoken math problems at roughly the level of a whisper. We present results showing that participants answered these math problems during the dream, and discuss implications for future dream research. Introduction: background of the literature on targeted memory reactivation, lucid dreaming, verbal cues during sleep, and dream reporting. Methods: information about participants, how we establish lucidity, information about stimuli played during sleep. Results: examples of successful two-way conversations, summary of hits and misses so far Discussion: future avenues could include establishing stronger communication out of the dream via other methods, assigning tasks, asking about dream content.

Probing the Phenomenology of Semi-Lucid Dreams During Home Induction Attempts

Remington Mallett, Michelle Carr, Karen Konkoly, Martin Freegard, Ceri Bradshaw, Michael Schredl

Austin, TX, USA

Lucidity is not an all-or-none phenomenon. Often, subjects report being some variant of “a little lucid” as opposed to completely or not at all. As recent neuroimaging work begins to elucidate the neural underpinnings of lucid experience, understanding the subtle variation of conscious levels during lucid dreams is essential. Here, we focus on the experience of “semi-lucid” dreams, which we define as a dream where a lucidity level of 1-3 (on a 0-4 scale) is reported upon awakening. To get a grasp on such semi-lucid dreams, we expanded upon the previously used Dream Lucidity Questionnaire to include probes that request further explanation as to why a dream was reported as semi-lucid. The goal of these modifications was to attempt to diagnose the qualitative characteristics that prevent a dream from being reported as fully lucid while still including some amount of lucidity. Participants were recruited from the general population (i.e., not necessarily experienced lucid dreamers) and were provided techniques for inducing lucid dreams at home. Additionally, participants were provided with extensive morning surveys that probed their dream experiences in detail. Across one week, participants attempted to induce lucid dreams at home and completed morning surveys. Here, we focus on the qualitative reports behind the subset of semi-lucid dreams, while also reporting more general induction success.

A Comparative Study on Mindsets towards Dreams in Western and Islamic Cultures

Alina Musiol

Düsseldorf, Germany

This study investigates the differences between a transcendent dream source which is supposed to be found in in Islamic culture, and an internal dream source, which should be found in Western cultures. These culture-dependent views on dreams were mentioned in the literature several times (e.g. Bulkeley, 2008; Crapanzano, 1975) Former studies showed that in many Islamic countries people believe in transcendent and prophetic dreams and value them in waking-life (e.g. Crapanzano, 1975; Hoffman, 2011). Comparatively, other studies showed that people in Western cultures do not value their dreams strongly in waking-life and view them largely as their inner reality (e.g. King, Welt, & Bulkeley, 2011).

Method: 512 people participated in the study. Their mean age was 28.63 ± 10.44 yrs. Range: 17 to 75 yrs.). 345 participants were Tunisians and 138 German. A French and German online questionnaire was constructed which enabled an online survey for the quantitative study. The questionnaire contained questions about their different attitudes toward dreaming, dream recall frequency, dream intensity, dream atmosphere and nightmare frequency (Schredl, Berres, Klingauf, Schellhaas, & Göritz, 2014)

Results and Discussion. The results showed that the main hypothesis about believing in a transcendent dream source in Islamic culture and in internal dream source in Western culture could be confirmed. This was shown by significantly higher values in the Tunisian sample regarding persons' behaviour towards dream content, the importance of the dream content in waking life and belief that the dream contains an important message for the dreamer. Participants from Tunisia stated more frequently their belief in the influence of the dream-self during dreaming than the German sample. Moreover, the German sample reported a higher dream intensity than the Tunisian sample. There was also found an effect of gender regarding the variable of the dream-self activity and viewing the dream as an important message, which could only be found in the Tunisian sample. The results demonstrated also a significant effect for the influence of the Islamic religion on the attitudes toward dreaming. The higher value of dreams in Islamic cultures in comparison to Western cultures could be confirmed. No significant differences were shown regarding nightmare frequency, dream recall frequency and atmosphere between the two cultures. The fact that Islamic cultures (exemplified by Tunisia) and Western culture (exemplified by Germany) differ in their attitudes toward dreaming is not only relevant to cultural psychology and dream research. Culture-based differences in attitude and perception express themselves also in the dream experience of a person, which is not under conscious control.

Summary of the presentation: Starting with describing the different view of dream source in Islamic culture and internal dream source in Western culture and describing the findings in literature. Demonstrate recent studies investigating this topic and their findings. Explaining the motivation for this study. Comparing the results of the Tunisian and the German sample and analyzing them regarding their value of dreams as an external or internal source and value of dreams in waking life. Discussing the results and possible implications of this study.

Techniques for using Lucid Dreaming in Physical Rehabilitation

Patricia Precin

Great Neck, NY, USA

Lucid dreaming is currently being used as a therapeutic tool for an array of psychosocial issues, yet its use in physical rehabilitation is not well documented. This poster will present lucid dreaming techniques that promote physical healing during physical rehabilitation and their neurological components. Lucid dreaming is currently being used as a therapeutic tool for depression, increasing self-knowledge, identifying and working through repetitious behavioral patterns, nightmares, anxiety, PTSD, increasing autonomy, and managing internal psychological conflicts. Despite its apparent effectiveness in improving psychosocial issues, there are few publications to date on its effectiveness in the treatment of physical disabilities. Literature suggests that lucid dreaming may be useful in physical rehabilitation, since movements in lucid dreams share the same neural substrates as their physical counterparts (Schadlich, Erlacher, & Schredl, 2016), and practicing a movement

during a lucid dream increases the ability to execute that movement during the waking state to the same extent as waking-mental and physical practice (Stumbrys, Erlacher, & Schredl, 2016).

Lucid dreaming provides a safe environment in which to practice physical movements that may be impaired and unsafe to practice while awake (e.g., ambulation). This poster will present lucid dreaming techniques that can be used to enhance physical health. Given that lucid dreaming-physical-healing techniques must be highly individualized and created by the dreamer, specific novel examples will be described that can be used by patients and practitioners to facilitate the remediation of physical limitations. Common to these examples are the following elements, which when used together, have been found to heal various physical injuries/conditions: 1) a pre-sleep intent to decrease discomfort/pain that is recalled during lucidity, 2) a non-harmful action taken to heal the body, 3) a positive result that is experienced in the lucid dream, and 4) a check for waking results. This poster will also explain aspects of brain plasticity and neural mechanisms reported in the literature that may occur during lucid dreams that facilitate physical healing. For example, lucid dreaming can provide activity- dependent-emotional-cognitive-behavioral experiences to individuals with physical limitations who cannot engage in physical activities during waking life. These activities (producing cognitive thoughts, physical movements, and resultant emotions) have been found to facilitate gene expression and brain plasticity necessary for physical rehabilitation, according to neuroscience literature on rehabilitation and healing (Rossi, 2002).

iBand+: A Novel Wearable EEG Sleep Tracking Headband

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Polysomnography (PSG) is widely used in sleep and dream research and has been the gold-standard for sleep stage determination for many decades. However, it has been shown that the unfamiliar laboratory setting has a large influence on sleep quality (Toussaint et al. 1995) and dream content (Domhoff and Kamiya 1964). In addition, PSGs are time- and cost intensive and are largely inaccessible to lay-people. A mobile, light-weight, non-disturbing recording modality would facilitate somnological research as well as making sleep research accessible to the personal domain. Furthermore, most consumer sleep trackers (such as apps and fitness trackers) are based solely on accelerometer data or heart rate. Using only these modalities, it might not be possible to accurately distinguish between REM and quiet wake. To address this issue, the inclusion of EEG as a primary recording modality is necessary (Ko et al. 2012). We have developed iBand+, a wearable EEG-based sleep tracking headband for sleep quantification. Using a single-channel frontal EEG and accelerometer, the band can be used to distinguish between Wake, Light, Deep and REM sleep. All computations can be performed on-board and stored on an SD-card, which eliminates any potential disturbance that might arise in electro-sensitive users due to active Bluetooth or Wi-Fi. Several studies have already demonstrated

the possibility of lucid dream induction via external stimulation (Stumbrys et al 2012). Therefore, the device has been equipped with stimulation capabilities using light and auditory stimulation to facilitate lucid dream induction.

A study has been conducted to test the signal quality of the iBand+ prototype. Twenty participants were recorded for at least one night wearing the iBand+ prototype. Simultaneously, a gold standard reference PSG was obtained using a Philips Alice 5. First results indicate that the prototype can accurately record all sensory modalities, including frontal EEG. A spectrogram analysis revealed a high correlation between the iBand+ EEG (Fp1-Fp2) and a reference PSG recording using F4-A1 or Fp1-Fp2. Due to the frontal location, electrooculography signals (EOG) can be extracted for REM detection or lucid dreaming verification. Using the sensory data (EEG and accelerometer), it is possible to accurately determine the sleep stage. This will enable the user to play stimulation during a preferred sleep stage, e.g. for lucid dreaming induction. Conclusion: The developed sleep monitor shows that sleep quantification using a wearable device is possible and that it may be used for non-clinical applications and personal use instead of a time- and resource intensive stationary PSG recording. Several studies have already shown the possibility of aiding lucid dreaming induction using light or auditory stimulation played during REM. Therefore, future studies should try to show to what extent this device can help lucid dream induction, as well as which sensory stimulation modality and training protocol is most efficient in doing so. Additionally, further development will investigate the feasibility of extending the iBand+ prototype to other recording modalities such as heart rate, temperature or microphone (e.g. for snoring and sleep talking) and tactile stimulation.

Dreaming and Emotion: The Neurophysiological Correlates of Emotion During Dreams

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In many cultures, dreams have been (and still are) attributed to ancestral influences. Dreams have been adorned in a veil of the mysterious; albeit, what has hitherto been unquestioned is the role that dreams have in peoples' lives. A point of concurrence between the elders, who claim ancestral influences, and, neuroscientists, is that dreams are functional. What may have been recognised as ancestral influences in dreams may be the ancestral convergence with areas of the brain referred to as the limbic system or the primitive brain, which is purportedly the 'seat of human emotion' (=affect). The core of dreams then arise from affective content that stems from our earliest genetically predisposed memories that have hitherto been repressed as a developmental necessity in aligning our ego to the objective outer world so that our behaviour is conducive to acceptable 'norms'.

Cell reparation during sleep occurs in a parallel process to reparation of the psyche insofar as the repressed affect is able to find expression in the dreaming brain, thus allowing unpleasure to be converted into pleasure by way of release of unpalatable affects from the id.

In the last decade, technological advances in neuro-imaging have increased exponentially, bringing to fore many

theorized conundrums into light. However, despite such vast improvements in technology, much of the human brain remains a mystery. A challenge posed in fMRI is obtaining data from the dreaming brain in humans. Yet, the dreaming brain 'openly' reflects the unconscious mind, inadvertently allowing scrutiny of the depths of the unconscious self, which results from brain activity.

Although affect has been scrutinised in recent studies, thus far, the role that emotion has in the dreaming brain must be further explored. Or as Pincus eloquently writes, "What is the mind and how is it related to the neural substrate of the brain?" (Pincus, 2003, p.1)

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