

WAKING SLEEP

DOZY GARY LACHMAN WAKES FROM HIS REVERIE TO EXPLORE THE VISIONS AND BRAINWAVES OF THE HALF-ASLEEP. MAIN ILLUSTRATION BY NICK DEWAR.



HYPNOS, GREEK GOD OF SLEEP. MARY EVANS PICTURE LIBRARY

IT'S AS IF
WE HAVE
ANSWERED
THE RIDDLE
OF THE
UNIVERSE

The brief transition between wakefulness and sleep we experience each night has been known by many names: the 'borderland state', the 'half-dream state', the 'pre-dream condition'. Its technical name is the hypnagogic state and, along with dreaming, it is one of the most fascinating altered states of consciousness we can experience without the use of drugs. In the hypnagogic state, visions, voices, weird insights and unusual sensations greet us as we drift out of consciousness.

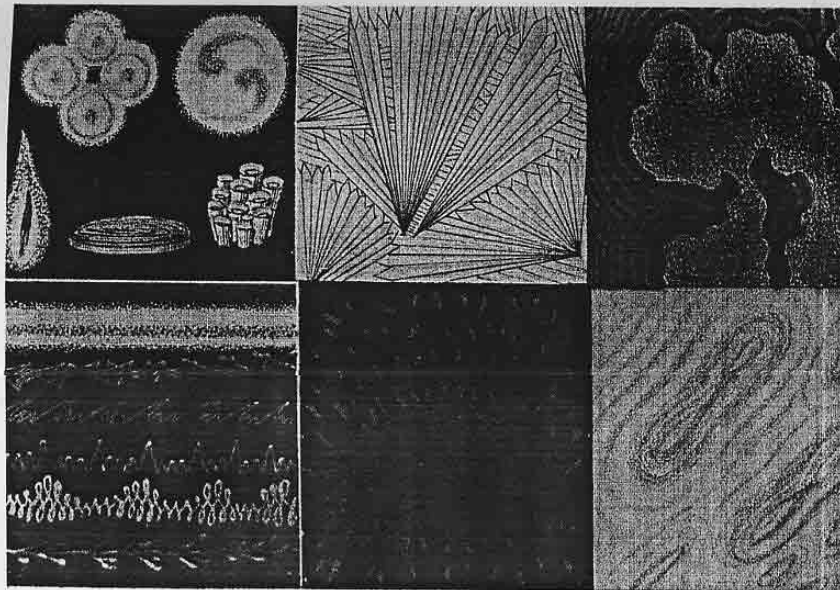
Faces may appear, threatening or comical. A landscape may open up, with distant mountains and wide, expansive vistas. Geometric forms, jewels, diamonds and intricate patterns may dance before our mind's eye, not unlike those seen under the influence of certain psychoactive substances. Splashes of colour, flares, sparks and cloud-like forms-known as 'entoptic lights', 'phosphenes' or *eigenlicht*, may drift through our drowsing consciousness, accompanied by strange, nonsensical sentences announcing portentous truths. We may feel we are floating, or that our body has grown to enormous proportions, or that we have suddenly grasped the answer to the riddle of the Universe.

The term 'hypnagogic' was coined by the 19th-century French psychologist LF Alfred Maury, and is derived from two Greek words, *Hypnos* (sleep) and *agogeus* (guide, or leader). Some years after Maury, the psychical researcher FWH Myers coined a complimentary term, 'hypnopompic', to cover similar phenomena occurring as we wake from sleep. Some researchers are keen to split hairs, but in general there seems little difference between the material produced in either state, the main difference being which point of the sleep cycle investigators have chosen to observe.

But if Maury, an indefatigable dream diarist, was the first to give the condition its 'official' title, he had only recognised something that observant sleepers had known for centuries. One of the first to remark on hypnagogic phenomena was Aristotle, who spoke of the "affections we experience when sinking into slumber," and "the images which present themselves to us in sleep." In the third century AD, Iamblichus, the Neo-Platonic philosopher, wrote of the "voices" and "bright and tranquil light" that came to him in the "condition between sleeping and waking" and which he believed were a form of "god-sent" experience. There is much evidence to suggest that the alchemists of the Middle Ages made use of a form of hypnagogia during their lengthy preparations and distillations. The weird characters and eerie landscapes that fill alchemical illustrations would not be out of place in a hypnagogic hallucination. In 1600, the astrologer Simon Forman wrote of apocalyptic visions of "mountains and hills" which came "rolling against him" on the point of sleep and beyond which he could see vast "boiling waters." Not long after, the political philosopher Thomas Hobbes spoke of "images of lines and angles" seen on the edge of sleep accompanied by an odd "kind of fancy" to which he could give "no particular name."

In the 18th century, the philosopher, scientist and visionary Emmanuel Swedenborg developed a method of inducing and exploring hypnagogic

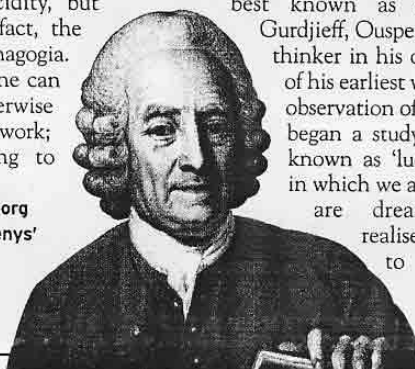
states, during which he travelled to heaven, hell and other planets. Other occultists followed in his footsteps. Oliver Fox, a theosophical writer in the early 20th century, used the hypnagogic hallucination of a doorway as a starting point for his astral travelling. The magical artist Austin Osman Spare journeyed to hypnagogic worlds and brought back images to adorn his canvases. Rudolf Steiner, whose visions of the Akashic Record seem very much like hypnagogic experiences, advised that the best time for



communicating with the dead was in the period between waking and sleep. Steiner claimed that if you asked the dead a question as you fell asleep, they would answer you the next morning as you woke up. Other explorers have included William Blake, Samuel Taylor Coleridge, Thomas De Quincey, Edgar Allen Poe, Gerard de Nerval, Havelock Ellis, CG Jung, Jean Paul Sartre, Ernst Jünger and the novelist Robert Irwin, to name just a few. In Irwin's 1996 novel *Exquisite Corpse*, Caspar, his surrealist hero, wanders about aimlessly in an almost continual hypnagogic state. Writers have always had an affinity with hypnagogia. Robert Desnos, with André Breton one of the leading voices of Surrealism, had a profound knack for automatic trance writing, aided by an enviable ability to fall asleep at will; something most other writers find only in their readers.

Most 'scientific' accounts of hypnagogia view it much as they do dreaming - a random, meaningless activity of the brain, a means, at best, of clearing its circuits, but more likely just a way of dumping psychic clutter. That reams of anecdotes and hundreds of introspective accounts by non-scientists show the shallowness of this approach need not be stressed. Anyone with the interest, time and determination can quickly discover that the dreaming brain is engaged in creative, analytical and, not infrequently, paranormal activity, merely by paying attention to the mental 'junk' it is supposedly throwing out. But while dreams are never observed, except for infrequent patches of lucidity, but always analysed after the fact, the same is not true of hypnagogia. With a little practice, anyone can learn how to watch otherwise obscure mental processes at work; processes which, according to

REVERIE: Emmanuel Swedenborg (right) and Hervey de Saint-Denys' hypnagogic art (above)



DREAMING ENGAGES THE BRAIN IN PARANORMAL ACTIVITY

some investigators, take place continuously alongside our waking 'rational' mental states. As well as providing some fascinating interior entertainment, familiarising yourself with hypnagogia is probably the best and most reliable method of developing a working relationship with your unconscious mind. Contrary to A Alvarez, whose cursory account in his book *Night: An Exploration of Night Life, Night Language, Sleep and Dreams* leaves much to be desired, hypnagogic phenomena are not "wholly impervious to art, narrative and interpretation." They have a recognisable structure and meaning. And, like other products of the dark side of the mind, they have an intelligence that often exceeds that of the waking mind observing them.

One of the earliest modern explorers of hypnagogic states was the Russian journalist and philosopher PD Ouspensky. Although best known as an interpreter of Gurdjieff, Ouspensky was a insightful thinker in his own right, and some of his earliest work involves a close observation of dreams. In 1905, he began a study of what today are known as 'lucid dreams', dreams in which we are conscious that we are dreaming. Ouspensky realised that the best way to achieve this state

was to try to preserve his awareness as he drifted off into sleep. His attempts to do this created what he called a "half-dream" state, in which he both "slept and did not sleep." Ouspensky also discovered something known to other hypnagogic voyagers: that creating these states at night usually led to a fitful sleep. He soon discovered that it was preferable to observe 'half-dream' states in the morning, when he was awake but still in bed.

Ouspensky's essay "On the Study of Dreams" in his book *A New Model of the Universe* is full of important insights. His 'half-dream' states filled him with a sensation of "astonishment" and "extraordinary joy" because he could see and understand how dreams were created, an experience he shared with the 19th-century French Orientalist and dream diarist Hervey de Saint-Denys. One of Ouspensky's insights was into the presence of an 'artist' in his dreams, who could take the slightest bit of material and create from it a remarkably 'real' adventure. Ouspensky recounts how he observed the dream artist at work during one of his 'half-dream' states.

"I am asleep. Golden dots, sparks and tiny stars appear and disappear before my eyes. These sparks and stars gradually merge into a golden net with diagonal meshes which moves slowly and regularly in rhythm with the beating of my heart... The next moment the golden net is transformed into rows of brass helmets belonging to Roman soldiers marching along the street below. I... watch them from the window of a high house in... Constantinople... I see the sun shining on their helmets. Then suddenly I detach myself from the window-sill and... fly slowly over the houses, and then over the Golden Horn in the direction of Stamboul. I smell the sea, feel the wind, the warm sun..."

Ouspensky also discovered that he had a certain control over these states and could alter his 'half-dreams' at will, an ability that many readers of 'lucid dream manuals' work assiduously to perfect. But what is most arresting is Ouspensky's remark that "we have dreams continuously, both in sleep and in a waking state." Had he lived to see it, Ouspensky would have been gratified by the hard, neurological evidence for this fact. According to neuroscientists Denis Pare and Rodolfo Llinas, the brain's simultaneous 40 Hz 'neural oscillations', which are associated with consciousness, also occur during REM sleep. Given this, Pare and Llinas were led to the conclusion that the only difference between our dreaming and waking states is that in waking states, the "closed system that generates oscillatory states" is modulated by

incoming stimuli from the outside world. In other words, what we call "waking state" is really an REM dream state, with a sensory topping. Or, as Ouspensky put it, we shouldn't speak of being either asleep or awake, but of "sleep plus waking state."

Another early hypnagogic explorer was the Freudian psychologist Herbert Silberer. Silberer was more independent minded than most of Freud's followers, and he paid for his intellectual freedom tragically, committing suicide shortly after being excommunicated from the master's circle. (He died gruesomely, hanging himself and leaving a flashlight shining in his face, so his wife would see him when she came home.) Silberer wrote a book about occultism and psychology, *Hidden Symbolism of Alchemy and the Occult Arts*, which pre-dates Jung's alchemical explorations by decades. His interest in hypnagogia began accidentally and his central insight is that the hypnagogic state is profoundly 'autosymbolic', i.e. that the symbols and images produced represent either the thoughts or the physical or mental state of the hypnagogist. In 1909 he published a paper on his research. One afternoon, drowsing on his couch, Silberer thought about a problem in philosophy, comparing the different systems of Kant and Schopenhauer. He had difficulty keeping the two views firmly in mind, but kept making the effort. When he believed he had Schopenhauer's position firmly fixed, he returned to Kant, but couldn't 'find' him. Then a dream image came to him: he was asking a secretary for some information. The secretary disregarded him entirely and finally gave him an unfriendly look. It struck Silberer that this hypnagogic dream was a symbol of his unsuccessful efforts to 'find' Kant's argument.

Other examples fill Silberer's paper. Thinking of improving an awkward passage in an essay, Silberer received an image of himself planing a piece of wood. Reflecting on the ambiguity of the human condition, he saw himself standing on a stone jetty extending far out into a dark sea. Losing his train of thought, he tried hard to retrieve it but couldn't. The hypnagogic image was of a piece of typesetting with the last few lines gone.

Silberer concluded that the conditions necessary to produce autosymbolic phenomena were "drowsiness and an effort to think", something familiar to most of us from our school days. The struggle of these two "antagonistic elements" elicits the autosymbolic response.

Many hypnagogists missed this point completely. The existentialist Jean Paul Sartre, who spoke of the hypnagogic state as "consciousness in bondage", failed to recognise it, as did the many Surrealists who followed Robert Desnos' lead and nodded off in cafés and other Parisian hangouts. One researcher who did recognise it was the psychologist Wilson Van Dusen, who came to the study of hypnagogia through a deep interest in the work of Swedenborg.



GETTING
SLEEPY,
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SNOOFING'

Swedenborg was probably the first to recognise the autosymbolic nature of hypnagogia, and his dream journals are filled with impressive examples. Van Dusen began practising hypnagogia himself and found that Swedenborg was correct. He also discovered that the 'meaningless nonsense' sentences so beloved of the Surrealists were actually just as autosymbolic as the images were. In his enlightening book *The Natural Depth in Man*, Van Dusen writes: "Much of the hypnagogic area looks simply like cute images and odd sentences being tossed around in one's head until one asks precisely what the individual was thinking of at that same moment. Then it begins to look like either a representation of the person's state or an answer to his query... I was trying to pick up hypnagogic experiences and heard, 'Still a nothing.' I wasn't getting much and it said as much. While I was trying to see in detail how hypnagogic experience forms I heard, 'Do you have a computer?' I was getting very sleepy in the hypnagogic state and heard 'The usual snoofing.' At the time the odd word 'snoofing' sounded like a cross between snooping (trying to snoop on the hypnagogic) and snoozing (getting sleepy)... I was



NEBULOUS: Psychologist Julian Jaynes (left) and geometric rock art from Anglesey (below)

thinking of the richness of the process and heard 'My liberal arts course.' While meditating on a pain in my head I heard 'Nonmaterial!'"

Not all hypnagogists were as observant as Van Dusen. The psychologist Julian Jaynes received the inspiration for his book *The Origin of Consciousness in the Breakdown of the Bicameral Mind* from an auditory hypnagogic hallucination. Like Silberer, Jaynes was struggling with a philosophical problem, the question of knowledge. Napping one afternoon, he heard a loud voice saying "Include the knower in the known." Including "the knower in the known" is a basic precept of much metaphysical and mystical thought, and was a response to Jayne's epistemological despair. Jaynes, however, was a convinced materialist; he ignored this insight and chose to see this hypnagogic gem as simply a "nebulous profundity", failing to grasp its import. His book is about hearing voices in the head.

After reading Van Dusen's book I began to observe my own hypnagogic states. I experienced some of the usual eerie physical effects, paralysis and heightened sensory sensitivity. I had been reading a book on Greek mythology and its influence on Freud and Jung, and as I drowsed I saw an image of a cellar door being pushed open. As I fell deeper into sleep, the door opened wide and out popped a crowd of mythological characters, Hermes, Apollo, the Minotaur. Clearly this was both symbolic of what I had been thinking about – using Greek myths to symbolise the unconscious – and my descent into the unconscious itself: the cellar doors.

One little known hypnagogic explorer is the Danish philosopher Jurij Moskvitin. In his little-read *Essay on the Origin of Thought*, Moskvitin describes how he came to observe "states of mind when consciousness is kept somewhere halfway between the waking state and dream." Moskvitin became aware of strange "sparks" and "smoke-like forms", which "upon close and intense observation became the elements of waking dreams, forming persons, landscapes, strange mathematical forms..." The sparks, Moskvitin writes, reminded him of "the tips of waves glittering in the sun" which on prolonged observation appeared to be "strange rings and nets moving swiftly over the waves."

Moskvitin associated his experience with religious art and the visions common to mystical experience – triangles, crosses, squares and other ornamental shapes – and he believed his experience was an old one, an insight that the 'psychedelic' rock art of prehistoric sites like Gavrinis seems to corroborate. (Most researchers associate the rock symbols with the 'entoptic forms'

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one can produce by rubbing one's eyes.) These patterns seemed to assume three-dimensional forms and, as Moskvitin writes, were projected onto the 'external world' by the eye itself; he compared the experience to the effect of a pointillist painting. Moskvitin came to believe that the hypnagogic patterns he was observing were the actual 'material' out of which the conscious mind 'builds' its representation of the external world. Although he conducted his experiments in the early 1970s, years before Llinas and Pares published their findings, his conclusions are strikingly similar. "If we remember that the essential difference between what we call the real world and the world of imagination and hallucination," Moskvitin writes, "is not the elements of which we build them up but the sequence in which these elements appear... then it follows that the sequences directed from without represent a limitation of the otherwise unlimited combinations of the selective forms released at random from within." Moskvitin's and Llinas' and Pares' work can be seen as confirmation of Owen Barfield's aphorism that "interior is anterior." Our inner world of dreams and visions comes before the outer one of sensory stimuli, something the poets have always known.

In recent years the most important work on hypnagogia has been done by the psychologist Andreas Mavromatis, who in 1987 published *Hypnagogia*, an exhaustively researched and deeply pondered exploration of all aspects of the experience. Mavromatis links hypnagogia to dreams, schizophrenia, creativity, meditation, mystical experience, and, most strikingly, paranormal experience. Silberer recognised that hypnagogic visions could be influenced by outside stimuli, either sensory changes – sound, light, scent – or verbal suggestions. Mavromatis discovered that they could also be altered by thought. During experiments in group hypnagogia, Mavromatis found that he could 'feed' images mentally to another hypnagogist. A member of one group was experimenting with psychometry, the ability to 'intuit' the history of some unknown object simply by touch. As Mavromatis listened to the psychometrist's account, he began to 'see' various different scenes. He then realised that what the psychometrist was describing were the very 'scenes' he was seeing. He tested this by consciously altering his visions. The psychometrist began to recount Mavromatis' new visions as well. Other accounts of 'shared hypnagogia' are recounted in Mavromatis' book.

Mavromatis believes hypnagogia originates in the subcortical structures of the 'old brain'. During hypnagogic states, the usually dominant neocortex – the evolutionarily recent and specifically 'human' part of the brain – is inhibited, and much older struc-

tures take over. Cortical activity is associated with clear, logical thought and with the perception of a well defined 'external' world. The older brain structures are attuned to inner experience, and to 'pre-logical' forms of thought using imagery, symbols and analogy. Mavromatis also remarks that the subcortical structures responsible for hypnagogic phenomena are always active, day or night, something we have already heard from Ouspensky, Moskvitin, Llinas and Pares.

Mavromatis, in a speculative chapter, relates hypnagogia to what is described in Tantric Yoga as the 'Fourth State', the junction of waking, sleeping and dreaming. Curiously, this intersection of states is paralleled in the anatomy of the brain itself. Mavromatis points out that the thalamus, which he con-

NUMBSKULLS: the mind's processes have been reinterpreted, often whimsically.

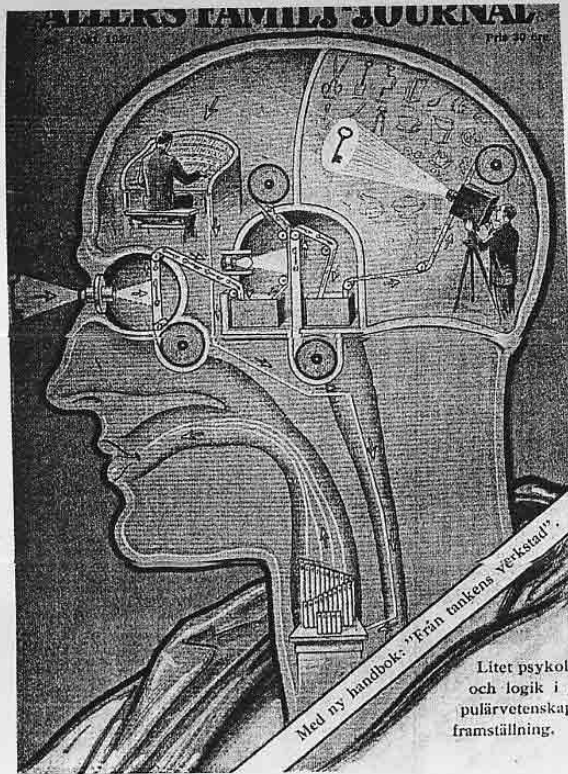
jectures is the "centre of consciousness" and the probable source of hypnagogic phenomena, is anatomically linked to the reptilian brain, limbic system and the cerebral hemispheres – the three 'houses' of the 'trune' brain. Each of the 'three brains' has a 'consciousness' of its own, and Mavromatis remarks that the consciousness of one would appear very strange to that of another. In hypnagogia this is precisely what happens. If a minimum level of cortical arousal is maintained at the point of sleep – Silberer's "effort to think" – then the consciousness of the 'old brain' can be observed.

The thalamus is also important for another reason. Located within it is the pineal gland, that tiny organ which the philosopher Descartes believed to be the seat of the soul, and whose purpose is still something of a mystery. In primitive reptiles, it was a kind of eye located in the top of the head, and in some contemporary vertebrates, like man, the pineal gland is still photosensitive. Recently, one crucial function of the pineal gland has become clear: it is the only gland in mammals that produces the hormone melatonin, which is important in the production of the neurotransmitter serotonin. That the pineal gland is located precisely where ancient Vedic literature places the 'third eye', whose function is 'spiritual vision' and the opening of which results in enlightenment, offers some hard, neurological evidence for a belief too often relegated to fancy and superstition. Mavromatis likewise remarks that in the Vedic tradition, the spiritual vision provided by the third eye was once available to man, and has only been temporarily lost, its return at a 'higher level' guaranteed through our spiritual development. He also relates the pineal gland and its unique function with the occult and esoteric symbolism of the sceptre of Hermes. In the twin snakes coiled about a rod crowned by a winged cone, Mavromatis sees the integration of man's conscious and unconscious minds, united by the unique state of hypnagogia.

We may not want to follow Mavromatis this far. But his study of hypnagogia is the most thorough to date, and it is difficult to see how it will be surpassed as the standard work. In any case, its clear that he, and the other hypnagogists we've looked at, have certainly given all of us something to sleep on. **FI**

◆ AUTHOR BIOGRAPHY

Gary Lachman is the author of *Turn Off Your Mind: The Mystic Sixties and the Dark Side of the Age of Aquarius*, and, as Gary Valentine, *New York Rocker: My Life in the Blank Generation* (both Sidgwick & Jackson). *'A Secret History of Consciousness'*, will be published by the Anthroposophic Press in spring 2003. He is researching a biography of PD Ouspensky and an occult reader for Dedalus Books.



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THE PINEAL GLAND LIES WHERE VEDIC TRADITION PLACES THE THIRD EYE