

Hashish Near-Death Experiences

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ABSTRACT

The historical literature on hashish-induced near-death experiences (NDEs) is reviewed, with particular reference to early French accounts. Most researchers endorsed the view of French psychiatrist Jacques Joseph Moreau that these experiences were hallucinations. Others, including spiritualist Louis-Alphonse Cahagnet, believed that hashish NDEs revealed an underlying reality as described in the works of Emanuel Swedenborg. Yet most accounts, resulting from high dosages, contained the elements and sequences of nondrug NDEs. Representative selections from this literature are translated here for the first time.

INTRODUCTION

Intoxication with hallucinogens has been associated with numerous subjective reports of death and dying. From the magical-religious uses of plant hallucinogens by New World Indians, through the psychedelic-assisted therapy of terminally ill cancer patients, to the recreational ecstasies of New Age users, the literature is replete with reports of hallucinations containing elements of near-death experiences (NDEs), if not afterlife voyages themselves (Harner, 1973; Kurland, Grof, Pahnke, and Goodman, 1973; Metzner, 1968). Perhaps more than any other hallucinogen, hashish has been associated with such NDEs. Early reports of hashish intoxications were so replete with these experiences that Aleister Crowley was prompted to comment in 1910 that "perhaps hashish is the drug which loosens the girders of the soul" (Regardie, 1968, p. 100). French spiritualist and psychopharmacologist Louis-Alphonse Cahagnet (1850) wrote that hashish allowed the soul to explore that spiritual world described by Emanuel Swedenborg (see Rhodes, 1982). Cahagnet collected his arguments and reports in a volume of hashish-induced NDEs (*The Sanctuary of Spiritualism*, 1850) and dedicated it to Swedenborg.

Jules Giraud, a French hashish addict and writer, described one such experience in his 1913 *Testament d'un Haschischéen*:

What? My turn to die? Not me! That would be too stupid! But a great blast of terror swept away my resistance and a frightful, measureless anguish possessed me. A glacial cold invaded my contracted legs and arms, and a blanket of ice crushed my chest. I drew a painful, oppressive breath, my ribs compressed into a corset like iron, and my breathing became more and more infrequent, even threatening to stop altogether [Giraud called to his medical companions for help, but they too had been stricken with an overdose of hashish]. . . . The path of the terrifying cold had finally reached my heart, which was no longer beating. From all available evidence I was going to die. . . . My implacable agony continued, but the appalling black void that had surrounded me up until then began to lighten a bit in a thundering downpour of insane, visionary images, such as happen to those about to drown. At the same time a splendid serenity before the fact of approaching death came over me bit by bit, making me forget my pain. . . . I was outside my body, spreading out in wonderful flashes of light, and I plunged my tentacles into the infinite, extending through all the past history of the Earth my mother, through all her geologic ages. . . . And among the glory of the stars, in an exploding apotheosis of suns and galaxies, I was the universal divinity. All this I saw from within. But from without it appears I was babbling, with furious gestures and hoarse, inarticulate cries. My acolytes, good hashish-fed medical men, were watching my crisis and wondering what to use for a straitjacket. In the end their presence and whispering pulled me down from my exaltation. . . . I repulsed them by incantations. . . . For I knew I was dead, for certain this time. And I finally knew Death's secret: by some means that I judged was habitual in dead people, what remained of my consciousness had become forever immobilized at the instant death seized me. But what a horrible, sinister idea—to embalm my soul within the illusion of this sepulchral chamber, behind whose windows there was nothing, I knew, nothing but the eternal void, absolute blackness, nonbeing (Kimmens, 1977, pp. 259-262).

These drug-induced experiences are generally viewed as hallucinations, and even Giraud reported that the above was a "macabre hallucination." While *elements* of NDEs have been reported for low-dose intoxications with hallucinogens like *Cannabis* (Siegel, 1980), there have been few accounts that have involved integrated sequences that more closely resemble the form, content, and qualitative aspects of the prototypical NDE (Ring, 1980). Such accounts may be associated with more toxic dosages that bring the subject closer to physical, and hence psychological, death. Giraud's experience occurred following ingestion of ten times the usual dose of hashish, prepared from the concentrated resins of the *Cannabis* plant. Using published historical recipes together with United Nations Narcotics

Commission assays of hashish used in the Middle East and France, we have calculated that the usual dose employed by nineteenth-century researchers represented 8.76-17.5 mg of delta-9-tetrahydrocannabinol (THC, the active principle in *Cannabis*), but some groups, like the hashish club described below, used Giraud's dosage (87.6-175.2 mg of THC). These dosages differ substantially from contemporary social-recreational marijuana intoxications resulting from the smoking of a mixture of *Cannabis* leaves and stems delivering an average of 10 mg of THC. Consequently, the experiences are also different, as reported in early explorations of French and American researchers. This literature, having remained largely untranslated and forgotten, is reviewed here.

EARLY HISTORICAL DESCRIPTIONS

Originally an Old World plant that originated in the desert region in Central Asia, *Cannabis* was probably unknown in the Western hemisphere before the sixteenth century. Archeological specimens have been found in both Asia and Eastern Europe, indicating its use by man dates back more than 6,000 years. Coarse hemp fabrics excavated from some of the oldest sites of human habitation in Europe show that most, if not all, early uses were for fiber.

The ancient Chinese Emperor Shen-Nung (2737 B.C.) is credited with encouraging the first medicinal uses of *Cannabis*. From China the use of *Cannabis* spread to India, where its mind-altering properties were exploited (via drinking and smoking) in religious rituals. Among Muslim Indians, *Cannabis* was referred to as "joy-giver," "sky-flyer," "heavenly guide," "soother of grief," and "poor man's heaven." From India, use spread to the Middle East where the custom of eating hashish flourished.

Early Arabic manuscripts from the tenth to sixteenth centuries describe experiences wherein the hashish user died and was transported to another world (Rosenthal, 1971). While an overdose of potent hashish could result in real bodily death because of lowered blood pressure and body temperature (see Nahas, 1973; Walton, 1938), most "deaths" were psychological:

By dissolving the moist elements in the body and thereby causing vapors [narcotic effects] to ascend to the brain, the hashish produces pernicious fancies, and by weakening the mind, it opens up the gate of fantasy (Rosenthal, 1971, p. 92).

An Arabic manuscript authored by al-Badrī (1464) notes that hashish users often see and hear a voice telling them that death approaches and the “secret” of the drug is that it permits “the spirit to ascend to the highest points in a heavenly ascension of disembodied understanding” (Rosenthal, 1971, p. 93). This ability of hashish to temporarily kill the physical body and liberate the spiritual was considered so potent that the murderous hashish eater was considered a suitable metaphor for the dangerous power of the drug. Accordingly, the poems and manuscripts of the period indicate that hashish makes every man a *hashishi* (assassin) unbeknown to himself. The contemporary myth of hashish-fortified assassins roaming throughout the Arabian nights represents little more than errors of translation and entymological misunderstanding. The assassin, a corruption of the word *hashishi*, was simply the hashish user who fell into a state of delirium wherein an ecstasy resembling an NDE could be experienced.

EARLY FRENCH EXPERIENCES

Hashish was introduced to Egypt in the thirteenth century and was widespread when Napoleon conquered that country in 1800. French physicians and psychiatrists followed Napoleon and returned to France with news of a hashish extract so potent that a user, as novelist Theophile Gautier wrote, could “taste the joys of Mohammed’s heaven” (Ebin, 1961). Psychiatrist Jacques Joseph Moreau introduced hashish to his patients, colleagues, and friends. Among them was Gautier, who founded Le Club des Haschischins in 1841 and later described his experiences:

The slightly convulsive gaiety of the beginning was succeeded by an undefinable sense of well-being, a calm without end. I was in the blessed phase of hashish. . . . No longer could I feel my body; the bonds between mind and matter were slender, I moved by simple desire into an environment which offered no resistance. . . . I dissolved into nothingness; I was freed from my ego, that odious and everpresent witness; for the first time I conceived the existence of elemental spirits—angels and souls separate from bodies (Ebin, 1961, pp. 11-12).

Moreau (1845) labeled these experiences hallucinations and went on to describe eight major elements of the hashish experience: general feelings of pleasure; increased excitement combined with a heightening of all senses; distortion of space and time; a keener sense of hearing combined with a greater susceptibility to music and the

phenomenon that ordinary noise can be enjoyed as though it sounded sweet; persistent ideas; emotional disturbances; irresistible impulses; and illusions and hallucinations. Conspicuous among the hallucinations were experiences of dying and death. Gerard de Nerval, best friend of Gautier and member of Le Club, wrote in 1850 that "my soul was projected into past and future," whereby

Hashish, in clouding the eyes of the body, enlightens those of the soul; the mind, once separated from the body, its weighty keeper, flies away like a prisoner whose jailer has fallen asleep with the key in the cell. It wanders happy and free in space and light, talking familiarly with the genii it meets, who astound with their sudden and delightful disclosures. It crosses in one easy bound through regions of indescribable happiness, all in the space of one minute that seems eternal (Kimmens, 1977, p. 108).

Contrary to Moreau's (1845) diagnosis of hallucination, de Nerval argued that these experiences were neither dreams nor hallucinations because "the hashish only brought forward a memory that had fled deep into my soul" (Kimmens, 1977, p. 109). Fellow Le Club member Charles Baudelaire (1851, 1860) also argued that the hashish experience, by its very involuntary nature, was reflecting, albeit with color and exaggeration, the very nature of a man's soul, and he likened the experience to Swedenborg's revelations of the spiritual state.

Other French writers contributed to descriptions of hashish experiences or else portrayed them in their own work. Physician Francois Lallemand was one of the first people in France to take hashish, and he submitted a thesis on the subject for the Doctor of Medicine degree in 1839. His book, *Le Hachych*, appeared in 1843, just as Le Club was being organized. A later edition appeared in 1848 with the cumbersome title *The 1848 Political and Social Revolution Predicted in 1843*, at which point Lallemand was a member of the Academy of Sciences and honorary professor at the University of Montpellier. Hashish provided Lallemand with a utopian vision of the future that was uncannily accurate in many detailed facts. For example, in one hashish experience he wrote:

[I] arrived in America by way of California. I crossed the Rocky Mountains on a railway, then over the Great Lakes. I was present at the recognition of two new states, those of Wisconsin and Iowa [sic], which ceased being simple territories in order to become stars of the Union. I was one of the first to pass through the Panama Canal. Finally, after visiting the Cape of Good Hope, Timbuctu, and the Mountains of the Moon, I journeyed down the White Nile and saw the cataracts (Kimmens, 1977, p. 122).

The above passage was written during a hashish experience in 1843. The railroad did not cross the Rockies until 1869; Iowa joined the Union in 1846, Wisconsin in 1848; and the Panama Canal, not even begun until 1881, was finished in 1914. The Mountains of the Moon were not explored until the next century. These apparent “pre-cognitive” and/or “prophetic” visions have been reported for other NDEs (Ring, 1982).

Other writers incorporated hashish experiences into works of fiction. For example, in Paris Alexander Dumas Père, while not a member of Le Club, wrote *Le Comte de Monte-Cristo* (1844), wherein he described how one of his characters reacted to hashish:

His body seemed to acquire an immaterial lightness; his mind brightened in a remarkable manner; his senses seemed to double their powers. . . . An enchanting and mysterious harmony rose to God . . . as if some nymph . . . wanted to attract a soul there, or to build there a city. . . . Then amidst these immodest shades there glided, like a pure ray, like a Christian angel descending on Olympus, a chaste figure, a calm shadow, a soft vision, which seemed to veil its virgin brow against these marble impurities. . . . (Kimmens, 1977, pp. 137-138).

CAHAGNET’S HASHISH ECSTASIES

Independent of Moreau and Le Club activities, another group of French subjects, many of them followers of Swedenborg’s philosophy, conducted experiments with hashish. They were led by Cahagnet. Cahagnet was born at Caen in 1805 and died at Argenteuil in 1885. He practiced a number of occupations including watchmaking and photography but was eventually attracted to spiritualism and the teachings of Swedenborg. Cahagnet authored 21 major occult and spiritual works, including the third major book (1850) ever written on hashish.

In an effort to explore the inner spiritual world, Cahagnet employed a variety of techniques including magnetism, electric shocks, burning incense, hemp seed, coriander, belladonna, anise, shellac, gum arabic, and even opium. But these methods failed to evoke the desired experience: “All I harvested was violent headaches. I don’t know how I was able to withstand all these experiments” (Cahagnet, 1850, p. 101). Wandering about Paris, Cahagnet found a pharmacy selling hashish, purchased some, and began self-experimentation leading to numerous visions.

But Cahagnet denied that these visions were hallucinations. Rather, he argued that the hashish state revealed the spiritual state

that one enters when one leaves the material state: the soul, liberated by hashish (“the medicine of the soul”), has the ability to observe and record universal truths. Just as Moreau (1845) argued that hashish allowed one to observe mental illness by provoking it artificially, Cahagnet interpreted that state (“the spiritual state as revealed by Swedenborg”) as mental well-being and truth. And just as Moreau encouraged his students, colleagues, and fellow *Le Club* members to experiment with the drug, Cahagnet gave measured dosages to a number of colleagues and subjects. Furthermore, he had them record in minute detail a running commentary on their experiences, which he termed “ecstasies.” He also debriefed them with a series of structured questions and gave them copies of Swedenborg’s works to compare with their own experiences.

One of Cahagnet’s subjects was identified as Mr. Lecocq, a marine clockmaker. His ecstasy is representative of the 14 others reported:

I took three grams of hashish, and I soon recognized the effects of this limitless gaiety which results in dilating all the muscles, all the molecules of the body, and appear to leave the soul thus more detached from its envelope. I threw myself on a bed with perfect calm, having confidence in prayer, I addressed one to God and begged him to enlighten me, if he saw fit. At once I saw myself gradually raised up passing by different luminous colors. . . . What pure light! What a feeling! That happiness! That rapture! . . . Following I saw, in a distance that seemed limitless to me, a luminous circle the same in color and light as that previously observed, and from the center of this creative hearth escaped bundles composed of luminous points of all colors. . . . Upon seeing this continual creation of luminous points which ended up spreading into a grandiose space, it seemed to me that I became smaller at the same time I was raising myself to admire what I saw. . . . I noticed that I was not actually in my body. . . . I entered one of those beautiful ecstasies where the soul seems to leave the earth, ascend to the celestial regions, and finds itself thus enveloped in a light that penetrates to the point of producing the most agreeable and profound feeling that could exist. Oh! I admit I was in a rapture impossible to describe. How grandiose in scope creation appeared! Oh! Yes, I was overcome before this infinite grandeur of God, not painfully overcome, but rather by a feeling of joy and admiration. . . . Those are the principal scenes which I saw in this hashish seance, which confirmed my first experience, leaving me with the conviction that all these images are not the fruit of hallucination, if by this word one understands illusion, or misunderstanding. Not knowing yourself what will appear to you, how can you say you create what you see, if that were so, the wonder could not take place, all the sensations of the soul would be entirely worthless, and you would be able to alter them, which does not happen (Cahagnet, 1850, pp. 196-200).

Selections from the remaining hashish ecstasies containing elements

similar to those found in NDEs are provided below. They are grouped according to the major categories discussed by Ring (1980) and Moody (1975):

Peace and the Sense of Well-Being

“Calm followed” (p. 134).

“What happiness! . . . What ecstasy!” (p. 139).

“I am happier than a king” (p. 179).

“I only know that I was perfectly happy” (p. 194).

Body Separation

“Detached from my material body as I felt I was” (p. 106).

“I saw myself dying; my body was lying on a bed, and my soul was escaping from all parts of it like a thick, black smoke; but instead of dissipating in the atmosphere, this smoke condensed two feet above my body and formed a body exactly like the one it had just left. Oh! How beautiful it is, I exclaimed. Alphonse, my friend, I have just died. I understand death. I understand how one dies, and why one dies. Oh! How sublime it is. Then I went into a state of which I have no memory at all” (p. 121).

“My material body evaporates, my voice is no longer mine: I am no longer myself!” (p. 139).

Entering the Darkness

“Then my apprehension increased to a degree that I cannot express” (p. 121).

“A state of darkness which one could truly call the lobby of life” (p. 178).

“The color black appeared to me to come out of the handsome hall resplendent in its clarity” (p. 197).

Seeing the Light

“It is a white mist like milk, it is an even white light” (p. 140).

“It is like a white light, pure and alone” (p. 141).

“What light I see” (p. 155).

“I see little luminous globes that rise up to the infinite heights; I am told that these are the souls rising to heaven” (p. 156).

“The light left this immensity which I was leaving as if from a little hole, enlarging into a sort of funnel, dividing into rays like golden wires” (p. 170).

“They are as brilliant as the sun” (p. 182).

“It seemed to me that this hall of light, this center of universal attraction was God” (p. 193).

Entering the Light

“This phenomenon is remarkable and gave me awareness of a very deep gratification of the passage of our terrestrial state to the spiritual state which we call death. I felt all the pains of the last moments of our material existence. I passed through agony and through death; this last moment of our life which brings so many tears to our dear ones, and which each one dreads as being the most painful, is on the contrary the one where the soul enters the vast land of liberty, the one where one breathes at one’s ease and rejoices in the most pleasant sensations that one can imagine; it is the moment of supreme happiness” (pp. 183-184).

Ineffability

“I find it impossible to describe” (p. 107).

“I would give five hundred thousand francs if . . . you could see what I see” (p. 122).

“What I feel, what I experience at this moment, it is impossible for you to understand. Here, friend, listen, I will try to explain it to you. But in fact no, it is useless, because I know that you would not understand” (p. 124).

“I cannot write all that I said and especially all that I saw during those three hours, words cannot express the feelings that the soul experiences” (p. 134).

“I was in a rapture impossible to describe” (p. 199).

Perceived Reality

“There are no hallucinations, there are only disordered observations” (p. 111).

“Eh! Don’t object that I was in a sort of hallucination which made it impossible for me to judge soundly; for I declare, never was my spirit so calm, never did I rejoice in a greater fullness of my reason” (p. 177).

“I looked on it as reality and not as a dream. A dream is only in this world; truth, light are in the other. They appear to you as soon as one penetrates it momentarily and even by an artificial means” (p. 181).

“Death is a state of the soul, another manner in which it can see things. I have died fifty times, by passing through fifty different states, in which I can observe different degrees of creation. . . . I leave it to the reader to judge whether in our material state we can raise ourselves to this height of conception and if these solutions feel like hallucination?” (pp. 202, 204).

Life Review

“The most beautiful sight a man could see was the reward for my sufferings, a vast panorama, where all that I would have seen, thought or known in my life was portrayed in brilliant colors, in the form of transparent pictures like window shades, lit from behind with an unequaled light. This panorama unrolled around me, turning with great brightness” (p. 108).

Encounters with Others

“A little ways away I see two spirits meet, to begin with they are much more beautiful, the woman, has long hair, she looks like Eve, as she is generally portrayed” (p. 127).

“At that moment I seemed to see the creator in a great light with the appearance of the human form” (p. 136).

“He sensed that his brother [dead] was there before him” (p. 151).

“I saw souls by the thousands. What was most surprising to me, was that I knew that they were souls and they did not have human forms, rather they were little spheres or balls barely as big as the end of a little finger, they were of a dazzling whiteness” (pp. 169-170).

“I looked at . . . my little girl, my Stephanie, who died at the age of nine. The face of this beloved child . . . appeared . . . in the clearest manner, the most striking, the most minutely exact. Even more, I saw her holding the index finger of her right hand in her nose; a habit she had developed in the last days of her lingering death, and of which I had no recall. At the end of an indefinite time, but nevertheless long enough so that I had no doubt of the reality of the vision, her face faded as it had appeared . . .” (p. 191).

Auditory Sensations

“What harmony! What subtle music! How grand it all is, how sublime!” (pp. 157-158).

“Each of his nerves and fibers seemed to him to be a harmonious chord which corresponds to these same instruments and gives a sound which, mingled with a great number of others . . . leaves his senses with a musical impression as complicated as it was agreeable” (pp. 160-161).

Visions or Thoughts of Great Knowledge

“God is so good that he has permitted me who knows nothing, to understand the marvels of the creation” (p. 122).

“Swedenborg was right to say that we have a universe in us, because I can embrace the whole universe at one time” (p. 124).

“Swedenborg, whom we revere so, was not in a different state than I; I see what he saw, I understand what he understood” (p. 126).

“I understand eternity” (p. 126).

“I also understood what space and creation was” (p. 136).

“It is heaven that I see, allow me, send me, oh my God, to men to tell and explain your law. . . . Men dwell in such ignorance; I was ignorant as they are, but if they knew what I know now!” (pp. 155-156).

“Now I must tell you how I thought I understood God” (p. 192).

Altered Sense of Time and Space

“I felt it [my body] stretch out into infinity” (p. 143).

“One cannot express the speed with which this multitude of pictures passes before the eyes of the spirit” (p. 182).

“The rapid succession in which the scenes that I saw took place proved to me that I could see in one second that which would take me years to observe in my material state; therefore there is no time in that state” (p. 183).

Threshold and Return

“I was no longer on earth, I would have liked never to return, but I thought of my family, and I understood that I had to return” (p. 135).

“I enjoyed myself enormously in this state of light, and as I was completely aware that it was not clear to me, I felt myself seized with regret at the thought that I would have to abandon it in a few moments to return to the material life, a regret that was not sweetened by the knowledge that I would return one day” (p. 178).

"Here ends the interesting and enlightening portion of my experiment. After that moment, it appeared that I entered a rather bizarre state. . . . I have very faint memory of this state. . . . A few cold breaths on the head and several swallows of vinegar-water, which you made me swallow, and sponging of the forehead and temples with the same water halted the attack and I reentered ordinary life" (p. 194).

Aftereffects

"Everything seemed sad to me compared to that which I had seen. The feelings of the soul are so vivid, and if one feels again such great happiness, all the earthly emotions and joys seem as nothing; but everything went away and although always having the memory of these pictures, one enters into the earthly state with too much regret" (p. 138).

"Under the influence of hashish one is absolutely convinced of this profound truth, and although rid of this influence it remains in your spirit for life" (pp. 200-201).

EARLY AMERICAN EXPERIENCES

While Moreau, Le Club, and Cahagnet were exploring hashish-induced experiences in France, independent experimentation was reported by several Americans traveling in Egypt and Syria. Bayard Taylor (1855) described his experiences in one of the earliest accounts by an American. Taylor found that hashish helped

to divest my frame of its earthly and material nature, until my substance appeared to me no grosser than the vapors of the atmosphere. . . . The sense of limitation—of the confinement of our senses within the bounds of our flesh and blood—instantly fell away. The walls of my frame were burst outward and tumbled into ruin; and, without thinking what form I wore—losing sight even of all idea of form—I felt that I existed throughout a vast extent of space. . . . It is difficult to describe this sensation. . . . The physical feeling of extended being was accompanied by the image of an exploding meteor. . . . Every effort to preserve my reason was accompanied by a pang of mortal fear. . . . The thought of death, which also haunted me, was far less bitter than this dread. I knew that in the struggle which was going on in my frame, I was borne fearfully near the dark gulf. . . . My companion was now approaching the same condition. . . . He cried out to me that he was dying . . . but what is death to madness? (pp. 134-146).

Taylor's experience included visions of unusual lights, music, and wondrous constructions of jewels and stone. These constructions were also described by an anonymous lawyer who resided in Damascus for five years and became an habitué of hashish. In the September

1856 issue of *Putnam's Magazine* he wrote:

I stood in divine elevation above a marble altar. There were giant colonnades on either side, sweeping forward to a monstrous portal, through which I beheld countless sphinxes facing each other down an interminable avenue of granite. Before me, in the mighty space between the columns, was a multitude of men, all bowing with their faces to the earth, while priests chanted anthems to my praise as the great Osiris. But suddenly, before I could shake the temple with my nod, I saw one in the image of Christ enter the portal and advance through the crowd to the foot of my altar. It was not Christ the risen and glorified; but the human and crucified Jesus of Nazareth. I knew him by his grave sweetness of countenance. . . . He beckoned me to descend. . . . He disappeared, and when I rose the temple had disappeared also. . . . (Ebin, 1961, p. 60).

The over-the-counter availability of patent medicine extracts of *Cannabis* provided others in nineteenth-century America easy access to the experience. The first full-length English work to appear on hashish was *The Hasheesh Eater* by FitzHugh Ludlow (1857), published anonymously while he was a student at Union College in Schenectady, New York.

Typically, Ludlow (1857) reported his hashish experiences as hallucinations wherein:

The moment that I closed my eyes a vision of celestial glory burst upon me. I stood on the silver strand of a translucent, boundless lake, across whose bosom I seemed to have been just transported. A short way up the beach, a temple, modeled like the Parthenon, lifted its spotless and gleaming columns of alabaster sublimely into a rosy air—like the Parthenon, yet as much excelling it as the godlike ideal of architecture must transcend that ideal realized by man. Unblemished in its purity of whiteness, faultless in the unbroken symmetry of every line and angle, its pediment was draped in odorous clouds, whose tints outshone the rainbow. It was the work of an unearthly builder, and my soul stood before it in a trance of ecstasy. . . . I pass in. . . . An atmosphere of fathomless and soul-satisfying serenity surrounded and transfused me. . . . They were all clad in flowing robes, like God's highpriests, and each one held in his hand a lyre of unearthly workmanship. . . . While his celestial chords were trembling up into their sublime fullness, another strikes his strings, and now they blend upon my ravished ear in such a symphony as was never heard elsewhere, and I shall never hear again out of the Great Presence. . . . Throughout all the infinities around me I looked out, and met no boundaries of space. . . . With ecstasy the whole soul drank in revelations from every province, and cried out, "Oh, awful loveliness!" . . . Through whatever region or circumstance I passed, one characteristic of the vision remained unchanged: peace—everywhere godlike peace, the sum of all conceivable desires satisfied (pp. 34-42).

But on at least one occasion he took an excessive dosage resulting in a particularly traumatic experience:

In the course of my delirium, the soul, I plainly discovered, had indeed departed from the body. I was that soul utterly divorced from the corporeal nature, disjoined, clarified, purified. From the air in which I hovered I looked down upon my former receptacle. . . . This was neither hallucination nor dream. The sight of my reason was preternaturally intense, and I remembered that this was one of the states which frequently occur to men immediately before their death has become apparent to lookers-on, and also in the more remarkable conditions of trance. That such a state is possible is incontestably proved by many cases on record in which it has fallen under the observation of students most eminent in physico-psychical science. A voice of command called on me to return into the body, saying in the midst of my exultation over what I thought was my final disenfranchisement from the corporeal, "The time is not yet." I returned, and again felt the animal nature joined to me by its mysterious threads of conduction. Once more soul and body were one (pp. 74-75).

In an experience vaguely reminiscent of Giraud's medically supervised hashish experiment, American novelist Mary Hungerford described in 1884 her "overdose" of hashish:

The physicians asked then the size and time of the last dose, but I could not answer. . . . In the midst of it all I left my body, and quietly from the foot of the bed watched my unhappy self nodding with frightful velocity. I glanced indignantly at the shamefully indifferent group that did not even appear to notice the frantic motions, and resumed my place in my living temple of flesh in time to recover sufficiently to observe one doctor lift his finger from my wrist, where he had laid it to count the pulsations just as I lapsed into unconsciousness, and say to the other: "I think she moved her head. She means us to understand that she has taken largely of the *cannabis indica*." . . . I died, as I believed, although by a strange double consciousness I knew that I should again reanimate the body I had left. In leaving it I did not soar away, as one delights to think of the freed spirits soaring. Neither did I linger around dear, familiar scenes. I sank, an intangible, impalpable shape, through the bed, the floors, the the cellar, the earth, down, down, down! (Palmer and Horowitz, 1982, pp. 88-89).

Believing she was dead, Hungerford became possessed by fear and loneliness:

It was not only death I feared with a wild, unreasoning terror, but there was a fearful expectation of judgment, which must, I think, be like the torture of lost souls. . . . In place of my lost senses I had a marvelously keen sixth sense of power, which I can only describe as an intense super-

human consciousness that in some way embraced all the fine and went immeasurably beyond. . . . As time went on, and my dropping through space continued, I became filled with the most profound loneliness (Walton, 1938, pp. 97-98).

Chemist Victor Robinson (1912), following in the footsteps of Moreau (1845) and Cahagnet (1850), conducted a series of experiments and careful observations of hashish. He described a typical experience:

I hear music. . . . The magic of that melody bewitches my soul. I begin to rise horizontally from my couch. No walls impede my progress, and I float into the outside air. Sweeter and sweeter grows the music, it bears me higher and higher, and I float in tune with the infinite—under the turquoise heavens where globules of mercury are glittering. . . . I am transported to wonderland. I walk in streets where gold is dirt. . . . Some faces are strange, some I knew on earth, but all are lovely. They smile, and sing and dance. . . . I hear my sister come home from the opera. I wish to call her. . . . The result is a fizzle. No sound issues from my lips. My lips do not move. I give it up. . . . Then the vision grows so wondrous, that body and soul I give myself up to it, and I taste the fabled joys of paradise. Ah, what this night is worth! (pp. 66-71)

Despite the vividness, spontaneity, and involuntariness of these images, Robinson, like many other American hashish users, recognized them as hallucinations: “I know they are not real, I know I see them because I took hasheesh, but they annoy me nevertheless” (Robinson, 1912, p. 72).

COMMENTS

The annoyance expressed by Robinson has been echoed throughout the French and American hashish literature. While the majority of writers endorsed the interpretation first suggested by Moreau (1845) that these hashish-induced NDEs were simply hallucinations, others, like Cahagnet (1850) and his group of Swedenborg followers, believed in an underlying spiritual reality. Cahagnet's ecstasies clearly described the major elements and sequences of NDEs, although it should be noted that they were not present in every intoxication. Indeed, at least one subject failed to report any subjective experience. But many of his subjects had visions, if not beliefs as well, of dying, death, and an afterlife. While their Swedenborg-inspired spiritual set and setting, important determinants of hallucinogenic experiences, undoubtedly influenced their NDEs, such “spiritual”-

flavored experiences also appeared, albeit less dramatically, among reports from other French and American users. Yet all mentioned common NDE elements and sequences.

Taken together, this literature suggests that hashish-induced experiences lie on a continuum ranging from mild inebriation to stages of dissociation, out-of-body experiences, hallucinations, and NDEs. The stages are not clearly divisible and any given stage may contain elements of the others, thus illustrating an inherent difference in the dynamics of hashish and nonhashish NDEs. The experience of moving along this continuum appears to be marked by changes in perceived reality. With low dosages of hashish, users view events as separate from themselves (e.g., seeing a light). Higher dosages produce a sensation of involvement in the events (e.g., going into the light). Concomitantly, images initially perceived as being "like" or "similar" to real events are perceived, with high dosages, as being "in fact" real events. Thus, the differences between the hashish NDEs and other nondrug NDEs appears to be more a function of dosage or intensity than the fact that a drug was or was not used to trigger the experience.

The high dosages of THC employed by Cahagnet and others invite speculation regarding an actual toxic threat to the body, perhaps common to the hashish NDE. While few subjects have actually died from hashish poisoning, we are unlikely to know for certain just how life-threatening these hashish intoxications are. Contemporary research guidelines prevent human subjects from receiving dosages equivalent (up to 175 mg THC) to those discussed here. Theoretically, these dosages are in the range of those expected to be lethal in approximately four percent of the intoxications (Nahas, 1973). Death would result from coma and respiratory arrest. But even in intoxications with lower dosages of 10-20 mg THC (Siegel and Jarvik, 1975), similar NDE elements can be found. To the extent that an overdose of hashish produces death, higher doses should produce more intense NDEs, and that is exactly what happens. Whether or not this reflects incipient death is unknown. But the resultant high-dose experience is more similar to a classical NDE than a traditional hashish intoxication or hallucination.

The hashish-induced NDE, as examined in the work of Cahagnet (1850) and others, is more strikingly similar to nondrug-induced experiences than was previously noted in a discussion of drug-induced NDEs (Siegel, 1980). While such similarity cannot resolve questions concerning the reality of a hashish-induced NDE, Moreau's (1845) explanation as hallucination was rejected by those who

experienced it. Indeed, Cahagnet, having read Moreau's book, commented that Moreau was only "struggling with the need to find new terms to classify the different states of the soul which are contained in dreams, thoughts, hallucinations, or derangement. . . . Suffice it to say that he is neither against us nor with us" (Cahagnet, 1850, p. 283). In keeping with this spirit, the present review of hashish-induced experiences adds to the catalog of situations associated with NDEs; it does not argue their interpretation.

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