Psychedelic and Entactogenic Drugs in the Treatment of Depression

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Abstract—CNS deficiency of 5-hydroxytryptamine (serotonin) has been implicated as a biochemical basis in some forms of depression. Existing drug modalities for treating depression include some with serotonergic effects. Studies suggest that psychedelic drugs are also serotonergic. This may indicate a role for psychedelics in the treatment of depression. Such treatment has already been attempted using psychedelic drugs in both the indoleamine and phenylalkylamine categories. Encouraging results seem to recommend further research, with special emphasis on drugs in the phenylisopropylamine subgroup of phenylalkylamines that are only peripherally psychedelic. Certain of these, called entactogens or empathogens, cause substantially less distortion of normative consciousness than classic psychedelics, such as LSD or mescaline. They could therefore be more easily assimilated into existing psychotherapy approaches, where their function would be to enhance the normal psychotherapeutic process rather than serving a maintenance role as chemotherapeutic agents. Their usefulness in such an application would be mainly at the start of psychotherapy in order to (1) reduce the client's "fear response" that often inhibits ability to deal with repressed traumatic material; (2) facilitate the client's interpersonal communications with the therapist, spouse or significant others; and (3) accelerate formation of a therapeutic alliance between client and therapist.

Keywords—depression, Ecstasy, empathogen, entactogen, hallucinogen, 5-hydroxytryptamine, LSD, MDA, MDMA, psychedelic, psychodynamic, psycholytic, psychotherapy, serotonin, suicide

The possibility that some forms of human depression are based on central nervous system (CNS) deficiencies of the neurotransmitter 5-hydroxytryptamine (5-HT) or serotonin was first suggested by Praag (1962) and then reinforced by the findings of other researchers (e.g., Lapin & Oxenkrug 1969; Coppen 1967). In a summation of his own later research, Praag (1982) concluded that 5-HT disorders are most clearly implicated in a subgroup of approximately 40% of patients afflicted with "vital depressions," defined as roughly corresponding to what is described in Anglo-American literature as endogenous depression; that vital depressive patients both with and without demonstrable disorders of 5-HT metabolism are symptomatologically indistinguishable; and that the vital depressive syndrome is etiologically nonspecific, representing a *predisposition* to depression that can be provoked by psychosocial, hereditary and/or acquired somatic factors. He also emphasized that 5-HT disorders probably play a causative rather than a secondary role in depression, as suggested by the fact that 5-HT potentiating compounds—such as the 5-HT precursor 5-HTP (5-hydroxytryptophan)—and possibly the "mother substance" L-tryptophan, an essential amino acid, can have a therapeutic effect in vital depression (Praag 1981).

It may therefore be significant that many of the drugs prescribed for treatment of depression are believed to be serotonergic. Fluoxetine and, in varying degrees, the tricyclics prevent the reuptake of serotonin into presynaptic nerve endings and monoamine oxidase (MAO) inhibitors prevent the breakdown of serotonin by the enzyme MAO. In either case, more serotonin is available for binding to postsynaptic receptors (Spiegel & Aebi 1983). It has also been suggested that lithium's ability to mitigate mood swings in bipolar affective disorders may be due to a normalization of reuptake of biogenic amines, including serotonin (Dunner & Fieve 1974). However, the specific mode of action of these drugs is still not certain. One theory

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(Schildkraut 1965) contends that "some, if not all depressions are associated with an absolute or relative deficiency of catecholamines, particularly norepinephrine, at functionally important adrenergic receptor sites in the brain. Elation conversely may be associated with an excess of such amines." But the "permissive hypothesis" developed by Prange and colleagues (1974) suggests a different explanation based on the role of serotonin, an indoleamine. It envisions depression and mania on a continuum instead of as polar opposites. In this model, fluctuating serotonin levels exert a permissive influence on the CNS; catecholamines, in a secondary role, then determine the consequent type of affective disorder observed in the patient.

In either case, Praag's research may have singled out patients whose affliction is based primarily on a deficiency of serotonin. This is especially significant considering that these particular patients include those who are most likely to make serious attempts at suicide. The suicide connection came to light when subnormal levels of serotonin were found in the autopsied brains of people who had killed themselves, especially the brains of violent suicides (Praag 1982). "The implications for suicide prevention seem obvious," Praag remarked in a subsequent *Wall Street Journal* article by Large (1983); there is "a certain biochemical abnormality. Now, let's try to increase serotonin and have an antidepressive effect. It seems a useful and not unproductive way to go."

In fact, there is an entire class of psychoactive drugs that almost certainly derive their main effect from serotonin mediation (Grinspoon & Bakalar 1979; Meltzer et al. 1978; Winter 1975; Andén et al. 1974; Haigler & Aghajanian 1973; Freedman, Gottlieb & Lovell 1970). These drugs, the psychedelics, are reported to have demonstrated positive effects in the treatment of various psychological dysfunctions, including depression. The following discussion first considers these reports and theoretical explanations, then explores some implications for the efficacious treatment of depression in the future using drugs in a related subgroup.

PSYCHEDELIC PSYCHOTHERAPY

Psychedelic Drugs Defined

One comprehensive overview of psychedelics concedes that "these drugs may be best defined by negatives. They are not sedatives, hypnotics, narcotics, stimulants, depressants, deliriants, anesthetics, analgesics, or euphoriants; or rather they can be all or none of these" (Grinspoon & Bakalar 1979:5). On the most basic level, according to chemical structures, psychedelics are divided into two main categories: indole derivatives and phenylalkylamines. The indoles, with more than one carbon ring, include lysergic acid amides such as *d*-lysergic acid diethylamide-25 (LSD), tricyclic carbolines, ibogaine and substituted tryptamines including psilocybin. Phenylalkylamines, with only one carbon ring, comprise two subgroups: phenylethylamines, such as mescaline; and phenylisopropylamines or amphetamines. It is suggested that a useful way to circumscribe these drugs by definition is in reference to a central or prototype drug such as LSD, which produces almost all the effects that any of the others produce, and at much smaller doses. Thus, Grinspoon and Bakalar (1979:9) stated the following:

> Whether a drug should be regarded as psychedelic or not can be said to depend on how closely and in what ways it resembles LSD; the resemblance must be judged by the drug's cultural role as well as by its range of psychopharmacological effects. From this point of view, the group of psychedelic drugs has a clearly defined center and a vague periphery; the fewer of the family features a drug has, or the less likely it is to be used by the same people or at the same places and times as LSD, the less social and pharmacological claim it has to be called psychedelic. Unavoidably, the necessary exclusions and inclusions will be somewhat arbitrary.

Historical Precedent for Psychedelic Psychotherapy

Grinspoon and Bakalar (1986, 1979) observed that psychedelic drugs obtained from plants have been used in a number of cultures for thousand of years for the relief of neurotic and somatic symptoms. Healing, in this context, is the outcome of certain religious or magical rites conducted by a shaman or professional healer. The therapeutic role of psychedelics in these rites is to elucidate an underlying problem by projecting unconscious material into consciousness (often symbolically), to forge a bond between the patient and the healer, and to facilitate insights in the patient that the healer helps to integrate through guidance and interpretation. The authors noted that this process is similar to modern psychotherapy.

Psychedelic Psychotherapy Through the Mid-1960s

The possibility that psychedelic drugs can help facilitate the modern psychotherapeutic process was virtually ignored in the United States and Europe until about 1950. Between then and the mid-1960s, more than 1,000 clinical papers describing 40,000 patients who had taken part in psychedelic therapy or other research trials were published, as well as several dozen related books; and six international conferences on psychedelic drug therapy were held (Grinspoon & Bakalar 1983). By the mid-1950s, it was recognized that psychedelics function as "nonspecific amplifiers"—drugs that project into consciousness (amplify) unconscious memories, fears and other subjectively variable (nonspecific) psychological material. Among the first announcements of this highly significant finding was an overview report titled *Ataractic and Hallucinogenic Drugs in Psychiatry*, written by a team of international experts convened by the World Health Organization (1958). This report challenged the prevailing idea that psychedelic

drugs are "psychotomimetic" (i.e., capable of inducing a "model" or temporary psychosis). Instead, the team concluded (p. 39) that "it may be a gross over-simplification to speak of drug-specific reactivity patterns. On the contrary, experience suggests that the same drug, in the same dose, in the same subject may produce very different effects according to the precise interpersonal and motivational situation in which it was given." It was also suggested (p. 8) that "there is some similarity between the problems posed by the subjective drug-induced experiences, and the analytic experience; and tools used in one may find a fruitful area in the other."

Two different types of psychedelic psychotherapy emerged (Grinspoon & Bakalar 1979). One emphasized a mystical or conversion experience and its aftereffects; this was thought to be especially effective in reforming alcoholics and criminals. The other explored the unconscious in the manner of psychoanalysis; it focused on the treatment of neuroses and psychosomatic disorders. The first kind, known as *psychedelic therapy*, involves one session with a single heavy dose in the range of 200 mcg of LSD and higher (LSD's threshold of psychoactivity is about 50 mcg). The second kind, *psycholytic* ("mind-loosening") *therapy*, involves relatively small doses seldom exceeding 150 mcg of LSD, administered in numerous sessions. Advocates of both approaches claim to have accomplished some significant improvements in their patients. These results, though compelling, are open to question. In most cases they are either anecdotal or lack a control group. Anecdotal reports can be questioned for several reasons, including placebo effects and the patient's and therapist's biases in judging improvement. Control groups are also a problem; the effects of psychedelics are so unmistakable that using them effectively rules out a blind study. Nonetheless, with these few limitations acknowledged, it is clear that human research using psychedelic drugs turned up some promising results with implications for the treatment of depression.

Treating Depression with High-Dosage Psychedelic Therapy

High-dosage psychedelic therapy was mainly used in the treatment of severe psychological and psychosocial dysfunctions, such as criminal psychopathology (e.g., Shagrass & Bittle 1967; Leary et al. 1965) and autistic schizophrenia in children (e.g., Fisher 1970; Bender, Cobrink & Sanker 1966). Depression was frequently mentioned as one of a cluster of symptoms in patients who were treated by this method, but it rarely was the therapeutic focus of a dedicated human trial. As a consequence, virtually no significant studies concerning this specific application are reported. One exception is a study by Savage and colleagues (1973) involving 96 hospitalized patients with severe and chronic neuroses; their symptoms—including sleeplessness, crying, agitation, loss of appetite and suicide attempts—were diagnosed as depressive reactions. They were randomly assigned to one of three groups that were treated with, respectively, conventional methods, 50 mcg of LSD, and 350 mcg of LSD. The LSD was administered in a single dose after three to five weeks of preparation. Results were measured by the Minnesota Multiphasic Personality Inventory and other psychological tests. All three groups remained in the hospital for six to eight weeks. At the end of that time, some degree of improvement was found in all the patients, but primarily in the two LSD groups and especially in the high-dose LSD group. Six months later, improvement in all three groups was the same, but 12 months later the high-dose group again seemed more improved. Eighteen months later it again appeared that all three groups were equally improved. The authors observed that in retrospect men seemed to have done better on the high dose of LSD and women better on the low dose. But considering the unexplained fluctuation in comparative improvement over time and possible treatment variables, such as differing degrees of therapeutic alliance, these results, however interesting, cannot be regarded as conclusive.

Treating Depression with Psycholytic Therapy

In contrast to the psychedelic therapy approach, the psycholytic method using relatively mild doses of psychedelic drugs has reportedly achieved more consistent and clearer results in successfully treating depression. This is supported by a retrospective overview study that summarized 42 papers on psycholytic therapy that were written between 1953 and 1965 (Mascher 1967). Sixty-eight percent of the cases were described as severe and chronic; most of the rest were described as severe. Diagnoses included depressive reaction, among other syndromes. Mean duration of treatment was four and a half months, with patients undergoing a mean of 14.5 psychedelic sessions. The rate of "much" or "very much" improvement was 62% for depressive reactions. Fifteen follow-ups, taking place on the average two years after treatment, found that 62% of the successful cases were the same or better and 35% were slightly worse; only a few had relapsed. Mascher acknowledged a problem with evaluating data from a group of studies so diverse, but concluded that the relatively short treatment time gives psycholytic therapy an advantage over psychoanalytic psychotherapy. However, to make a distinction between these approaches is somewhat misleading. In most cases, drugs used in psycholytic therapy perform what is probably best described as an *adjunctive* or *enhancing* role relative to psychodynamic or psychoanalytic forms of psychotherapy. Grinspoon and Bakalar (1979:195) remarked that:

> In the psycholytic procedure moderate doses of psychedelic drugs are used to aid in psychoanalytically oriented psycho-

> therapy by uncovering the unconscious roots of neurotic disorders. As many as a hundred drug sessions over a period of two or more years may be required, although most treatments are much shorter. Patients may be hospitalized or not; they may be asked to concentrate on interpretation of the drug-induced visions, or symbolic psychodrama, or regression with the psychotherapist as a parent surrogate, or on discharge of tension in physical activity. Props like eyeshades, photographs, and objects with symbolic significance are used. . . . The theoretical basis of this kind of psychotherapy is usually some form of psychoanalysis. If birth experiences are seen as true relivings of the traumatic event, Rank's ideas may be introduced; and if archetypal visions are regarded as genuine manifestations of the collective unconscious, the interpretations will be Jungian.

A representative case study is that of a 35-year-old accountant who had been in psychotherapy for five years for chronic depression and crippling obsessive symptoms. He was given 100 mcg of LSD and the psychiatrist suggested a fantasy about castrating his father (Savage et al. 1962:437):

> The effect was electric. He exploded with laughter. The feelings and fantasies about father came pouring out, as though Moses had smote the rock. For the balance of the afternoon we reveled in an exchange of fantasies about his father.
>
> From that day he was a changed man. Previously he had been a Milquetoast at work, whom everyone pushed around. Now he became self-assertive and positive. He no longer let advantage be taken of him. He was poised and comfortable. . . . During the next LSD session (150 micrograms) he was able to continue the work of the preceding session. With the dread of his father laid to rest . . . he expressed for the first time the desire for a girl. In the months following, astounding changes developed. He developed a sense of humor; he became efficient; he began to date; he made plans to leave his job and set up his own business, and this he actually accomplished. He enjoyed dating and experienced intense sexual feelings. . . . In seventeen (now nineteen) years of practicing psychotherapy I have never seen as much change in an individual with a rigid obsessional character. The change has been permanent.

Grof's Perinatal Psychology

The work of one researcher in particular stands out among proponents of the psycholytic method; that of psychiatrist Stanislav Grof, who "probably has more continuing scientific experience on the effects of psychedelic drugs on patients than anyone else" (Sagan 1980:357). From 1956 through 1973, Grof conducted or participated in over 3,500 psychotherapy sessions in which LSD or other psychedelics were used as facilitators, and reviewed the case histories of 1,800 additional such sessions conducted by other researchers. Grof (1976:216) concluded from this database that psychedelics function as a "kind of 'inner radar' that scans the unconscious, identifies areas of high affective tension, and brings them to the open." He calls these areas of high affective tension *COEX systems*—systems of condensed experience. A COEX system constitutes a cluster of unconscious memories united by a common emotional theme. Its core, which sets the theme, is usually an infantile trauma. All subsequent traumas or memories of threatening life situations evoking a similar charge of emotion are filed along with the core, reinforcing the system. Eventually these constellated memories can alter behavior and mood. The goal of psycholytic therapy, Grof says, is to make the patient aware of these unconscious memory systems. Once the patient confronts the core trauma and relives its emotional content, its power to compel is abreacted. To that extent, Grof's theories are not inconsistent with Freud's.

Grof also discovered that individual COEX systems seem to be grounded on one of four "basic perinatal matrices" (BPMs) reflecting different stages of the birth process (see Grof 1985, 1976). BPM II, for example, "remembers" the stage when intrauterine contractions squeeze the fetus while the cervix still is closed. It therefore has a powerful affinity for COEX systems organized around the emotional theme of entrapment in a hopeless situation. Until recently Grof emphasized that BPMs may or may not derive from the actual birth experience, a linkage that mainstream psychologists consider highly suspect. "We can follow Freud's example," he suggested, "in regard to the relivings in LSD sessions; whether they are real memories or vivid fantasies derived from sources and created by mechanisms not clearly understood at present, they seem to be very relevant from the point of view of the patient's psychopathology, as well as the psychodynamics of LSD psychotherapy" (Grof 1976:70). Recently, however, he affirmed: "I can no longer deny the evidence that we have the capacity to relive the emotions and physical sensations we had during our passage through the birth canal and that we can re-experience episodes that took place when we were fetuses in our mothers' wombs" (Grof & Bennett 1992:18).

Support for Grof's Perinatal Theory

Before discussing how Grof's perinatal psychology theory applies to the treatment of depression, it is worth noting that the question of whether or not it is possible for people to remember their own births is still open. Grof concluded that such memories are real as opposed to vivid fantasies after witnessing numerous "rebirthing" experiences among participants in over 20,000 sessions of his Holotropic Breathwork™ therapy, an alternative to drug-assisted therapy devised by himself and Christina Grof. According to Grof and Grof (1990:144): "This method, combining simple means, such as faster breathing, music and sound technology, and a certain form of body work, can induce the entire spectrum of experiences that we used to see in psychedelic sessions. These experiences are generally gentler, and the person has more control over them, but their content is essentially the same, although no drugs are involved." Grof (1988:170-84) attributes the "pneumocathartic" effects of intense breathwork to hyperventilation without squarely addressing the question of an

underlying physiological mechanism. However, in a seldom-cited essay, Grof and Halifax (1976:196-97) had earlier reported that the medical condition called *anoxia*, involving a limited supply of oxygen or an excess of carbon dioxide in the brain, can induce "abnormal mental states" and "unusual experiences quite similar to LSD." They further noted that maneuvers "restricting the supply of oxygen have been widely used through the ages in the process of inducing unusual experiences." While the essay is otherwise limited to a discussion of what this portends for the psychology of people at the point of death, it may also be relevant to breathwork.

This should not be taken to mean that the mental effects of either LSD or breathwork are entirely due to anoxia. In the present authors' opinion one of the most seriously neglected areas of psychedelic research is that of proprioceptive effects and how they are experienced psychologically. This might explain certain sensations commonly reported by users of the drugs, such as seeming to transcend the physical boundaries of one's skin and thereby experience "ecological awareness" (Smith 1964). It might also confirm the existence of a "state-dependent learning" mechanism proposed by Verny and Kelly (1981:184-93) that takes place in utero by means of "two separate but complementary systems serving our memory faculties." One involves the central and autonomic nervous systems, which are operative by the sixth month after conception. The other is vaguely described as a "para-neurological" system that lays down "organismic memories" in individual cells. The authors seem to be suggesting that a fetus can "remember" somatic and emotional sensations predating development of a cortical processing function in the weeks after birth. Such memories, according to their theory, are later recollected in postnatal life when the original state is somehow recapitulated, possibly by means of drugs (including psychedelics), hypnosis or free association. No cognitive memory content is suggested; however, the authors contend that these noncognitive memories may contribute to "attitudinal predispositions and vulnerabilities in utero." Verny and Kelly (1981:65) also noted that "some forms of depression can also originate in utero. Usually, these are produced by a major loss. For whatever reason—illness or distraction—a mother withdraws her love and support from her unborn child; that loss plunges him into a depression. You can see the aftereffects of this in an apathetic newborn or distracted sixteen-year-old; for, like other emotional patterns set in utero, depression may plague a child for the rest of his life. This is why treating infant depressions has recently become one of psychiatry's chief priorities."

Another possibly relevant observation is that made by Riedlinger and Riedlinger (1986). Citing research by Tuber and colleagues (1980) involving paired stimuli learning tests on a hydroencephalic and normal twin, they suggested that subcortical learning mechanisms demonstrated by this study might sustain neurological imprints of strictly somatic experiences. Such imprints, the authors contend, would be more like "potential" memories having no psychological content until they are brought into consciousness using psychedelic drugs or other, less efficient means. Inevitably the translation from strictly somatic to somatic-psychological memories would impart "experiential content" referential to postnatal memories having similar physiological concomitants, such as patterned activation of visceral nociceptors, vasoconstriction or adrenal response. Riedlinger and Riedlinger (1986:23) commented that "though Grof does not use the analogy, this process could be likened to what happens when iron filings are scattered on a sheet of paper covering a magnet. The filings fall into a pattern that makes manifest—indeed, that is determined by—the presence of the otherwise invisible magnetic field. So too, it can be speculated, BPMs provide organizational matrices for postnatal memories that consequently give the BPMs a kind of secondary form as they accumulate—a form that is determined fundamentally by physical trauma at birth."

It may be relevant in the context both of this theory and of Grof's psychedelic research that serotonin's *physiological* effects include "powerful activation on smooth muscle" and modification of "neurogenic vasoconstrictor tone" (Twarog 1958:159-60).

Evidence suggesting that prenatal physical trauma is somatically "encoded" in the CNS includes studies by Murray and Johnsen (1985) and Murray and colleagues (1987), who found that prenatal "systemic insults" leave a record in the formation patterns of infant tooth enamel. Particular patterns seem to correlate with hearing difficulties and other postnatal neurological impairment.

Finally, a study by Salk and colleagues (1985) deserves mention. This team set out to investigate a possible relationship between falling perinatal mortality rates over the past 30 years and simultaneously rising rates of adolescent suicide. Forty-six risk factors from the prenatal, birth, and neonatal records of 52 adolescents who had committed suicide before age 20 and two matched controls for each subject were analyzed blind. The results showed statistically significant differences between the suicide victims and each of the controls and no difference between the controls. Three specific risk factors were shown to have a powerful capacity to differentiate suicides from controls: respiratory distress for more than one hour at birth; no antenatal care before 20 weeks of pregnancy; and chronic disease of the mother during pregnancy. It is worth noting in this context that Grof's perinatal psychology theory puts emphasis on prenatal toxicosis and perinatal physical distress, in contrast to traditional birth trauma theories, such as Rank's (1974), that emphasize postnatal separation anxiety.

Theories and Treatment of Depression Based on Grof's Research

Grof (1985) explains the major forms of depression in a theoretical framework that ascribes a pathogenic role to both the perinatal and the COEX realms of experience. The first major forms he discusses are *severe inhibited depressions* of endogenous and reactive nature. According to Grof, these are rooted in the second perinatal matrix, BPM II. This is based on his repeated observation that psychedelic sessions and postsession intervals dominated by the second matrix show all the essential features of deep depression: agonizing mental pain, despair, overwhelming feelings of guilt and inadequacy, deep anxiety, lack of initiative, loss of interest in anything, and anhedonia. Consistent with manifestations of BPM II, these depressions are characterized not only by total obstruction of emotional flow but also by an energetic blockage and severe inhibitions of major physiological functions, such as digestion, sleep patterns, and sexual activity. This stage of the birth process also involves interruption of the symbiotic connection with the maternal organism through uterine contractions, termination of the supply of nourishment and warmth, and exposure to danger without protection. "It stands to reason, then," says Grof (p. 259), "that the typical constituents of COEX systems dynamically related to depression involve rejection, separation from and absence of the mother, and feelings of loneliness, cold, hunger, and thirst, during infancy and early childhood." Oppressive and punishing family situations that reinforce the patient's role as a victim in a "no-exit" situation are other important determinants cited by Grof. Nonviolent suicide sometimes results. Grof believes this is based on an unconscious memory that BPM II was preceded by the experience of relatively peaceful intrauterine existence before the beginning of labor (BPM I). A person trying to escape the second matrix would therefore be likely to choose a relatively peaceful mode of suicide consistent with this memory: an overdose of drugs, inhalation of carbon monoxide or natural gas, drowning, bloodletting in warm water or freezing in snow. Elsewhere Grof (1976:57-60) gives an instructive example, worth quoting at length, of how psycholytic therapy resolves such depressions:

> Richard was a 26-year-old student who had suffered for several years from severe, unrelenting depression that resulted in six serious suicidal attempts. In one of these, he ingested rat poison, which according to his words, reflected his feelings about himself and his critically low self-image. In addition, he had frequent attacks of intense free-floating anxiety, excruciating headaches, agonizing cardiac pains and palpitations, and severe insomnia. The patient himself related most of his complaints to disturbances in his sexual life. Although he had many friendly relationships with women, he was not able to approach them sexually. . . . At irregular intervals, he got involved in homosexual activities in which he always played a passive role. Here he was able to achieve momentary sexual satisfaction, but [he suffered from] subsequent feelings of guilt. . . . One of the most important COEX systems uncovered during Richard's LSD therapy was related to his passivity, helplessness, and the role of the victim that he had tended to assume in a variety of life situations. . . . A deeper layer of the same system contained condensed memory material related to Richard's experiences with his brutal, despotic, and autocratic father, a chronic alcoholic who used to physically maltreat the patient as well as his mother in the most cruel way. . . . Richard relived many such episodes of abuse in a rather complex and realistic fashion. . . . The next layer of the COEX system consisted of several traumatic memories from childhood. . . . [for example, he] tried to explore the inside of the family radio and got a strong electric shock . . . [and] drowning for a short time in his bathinette. . . . He came to the conclusion that the birth trauma was the fundamental prototype of all situations in which he felt absolutely helpless and at the mercy of a destructive external force. After the experiences of rebirth, positive ecstatic feelings of long duration occurred in Richard's sessions. They brought about a far-reaching improvement of the clinical condition. His depressions, anxieties, and psychosomatic symptoms completely disappeared, and he felt full of activity and optimism. His self-image improved considerably, and he was able to form an erotic relationship with a woman and have the first heterosexual intercourse of his life.

Grof (1985) also describes *agitated depression*, including mania, a form he associates with BPM III. This is the perinatal stage in which the fetus is forced through the birth canal. In psychedelic sessions it is manifest in visions of hurricanes, volcanic eruptions, explosions and other natural catastrophes, as well as by societal conflicts, such as bloody wars and revolutions. Characteristic features of depressions connected with BPM III include a high level of tension and anxiety, excessive psychomotor excitement and agitation, and aggressive impulses oriented both inward and outward. Typical associated physical symptoms are muscular tension, tremors and painful cramps, migraine headaches, uterine and intestinal spasms, nausea, and breathing problems. Associated COEX systems deal with aggression and violence, various cruelties, sexual abuse and assaults, painful medical interventions, and diseases involving choking and a struggle for breath. But subjects reliving BPM III do not experience themselves as passive victims. Instead they are actively fighting to defend themselves, remove obstacles or escape.

Concerning *mania* as a form of agitated depression and therefore an expression of the third perinatal matrix and associated COEX systems, Grof (1985) parts company rather dramatically with doctrinaire Freudian theory. The latter holds that mania represents an avoidance of being aware of depression. Instead, Grof argues, mania is psychogenically linked to the experiential transition from BPM III to BPM IV (separation from the mother and escape from the physical trauma of birth). As such, it is a clear indication that the patient is under the influence of the fourth and final perinatal matrix while still in touch with the third (Grof 1985:261):

> In experiential psychotherapy one can occasionally observe transient manic episodes *in statu nascendi* as a phenomenon suggesting incomplete birth. This usually happens when the subjects involved have already moved beyond the difficult experience of the [ego] death-rebirth struggle and gotten a taste and sense of release and escape from the birth agony. . . . LSD subjects whose sessions terminate in a state of incomplete rebirth show all the typical signs of mania. They are hyperactive, move around at a hectic pace, try to socialize and fraternize with everybody in their environment, and talk incessantly about their sense of triumph and well-being, wonderful feelings, and the great experience they have just had. . . . Extreme hunger for stimuli and social contact is associated with inflated zest, self-love, and self-esteem, as well as indulgence in various aspects of life.

Grof believes that violent suicide is closely associated with the agitated form of depression and therefore is related to BPM III (Grof 1985:264): "For a person under the influence of the third matrix, regression into the oceanic state of the womb [BPM I] is unavailable because it would lead through the hellish no-exit state of BPM II, which is psychologically worse than BPM III. However, what is available as a psychological escape route is the memory that once a similar state was terminated by the explosive release and liberation at the moment of biological birth."

Psycholytic therapy, like other forms of psychodynamic therapy, seeks to trigger this abreaction psychologically as an alternative to suicide. A possibly relevant finding is the "cathartic effect" of failed suicides reported by Praag and Plutchik (1985). They studied 25 patients admitted to a psychiatric unit in connection with failed suicide attempts and a control group of 50 patients consecutively admitted to the same inpatient service for various forms of nonpsychotic depression, but with no previous suicide attempts. The Hamilton Rating Scale for Depression and other instruments were used to retrospectively rate the mood of the first group of patients in the week before their suicide attempts and three to six days after admission following recovery. The mood of the control group was similarly rated one week before and one week after admission. A significant decrease in depression scores was shown for the suicidal patients and no systematic trends for the control group. Explanations discussed by the authors include the possibility that the suicide attempts "served to palliate feelings of guilt or remorse, or gratified hostile feelings toward others." They also propose hypothetically that the observed mood changes might reflect the "nonspecific effect of a serious somatic upheaval" having "physical consequences." Presumably this refers to a possible psychosomatic effect on endogenous factors that compelled the depressive behavior, such as insufficient serotonin levels in the brain. In fact, there is some evidence suggesting that stress and other psychological events can produce major changes in brain amine levels (Bliss & Zwanziger 1966; Maynert & Levi 1964; Barchas & Freedman 1963). Perhaps the serotonergic and psychological effects of psychedelic drugs are similarly interactive in some cases.

Limitations of Psychedelic Psychotherapy

Despite early reports of success in some areas of psychotherapy, both psychedelic and psycholytic therapy have certain limitations. The most obvious of these is illegality. All the "classic" psychedelics (e.g., LSD, mescaline, psilocybin) are currently Schedule I drugs and as such are restricted from clinical use in the United States. This has made it virtually impossible to obtain Food and Drug Administration (FDA) clearance for human trial research, though a handful of preliminary studies using LSD and other psychedelics for the treatment of alcoholism, mental distress in terminal cancer patients and other applications were recently approved and are proceeding.[1]

Another problem is that almost all the classic psychedelics are time-consuming to use, despite claims that they accelerate psychotherapy. Even low doses have pronounced psychoactive and behavioral effects lasting five or more hours. Clients therefore should be supervised throughout this period and for several hours afterward to minimize adverse effects. According to Strassman's (1984) review of the literature on adverse psychedelic drug effects, "it appears that the incidence of adverse reactions to psychedelic drugs is low, when individuals (both normal volunteers and patients) are carefully screened, supervised, and followed up, and given judicious doses of pharmaceutical quality drug." One program conducted for several years in the early 1960s by Myron Stolaroff and colleagues at the International Foundation for Advanced Study in Menlo Park, California, required several preliminary meetings for psychological screening and other preparatory work, including four or more one-hour "carbogen" sessions in which clients breathed a mixture of 70% oxygen and 30% carbon dioxide to stimulate an LSD-like "glimpse" of the unconsciousness; a full day for the LSD session; and supervision for all of the following day by someone who had previously finished the same program. Malden Grange Bishop's (1963) *The Discovery of Love* is a subjective account of the program by one of the clients, with fictional names.

In addition to the time constraints, another limitation is that therapists who use the drugs with patients must themselves be trained in order to effectively help guide the session. Yet training is currently limited to papers and books either published between 1950 and the mid-1960s when the drugs were first outlawed for clinical use, or which are based on original research from that period; no internships are presently available where therapists can train experientially. Furthermore, papers and books on the subject themselves have limitations. Most of them, it seems, describe "preliminary" research that is often anecdotal or involves too small a patient population, that fails to include con-

trols, and other such shortcomings. Data and especially case histories are typically presented in the framework of a certain theoretical structure, often related to psychodynamics. Insofar as the relevant research was done more than 20 years ago, this is perhaps to be expected. But it also conveys an impression that the drugs are useful only in the context of psychodynamic psychotherapy. Proponents of the latter school would possibly agree, though most would probably have reservations in regard to the birth trauma question. From their point of view, it may seem that the manifest content of a psychedelic session tends to vindicate psychodynamics by organically confirming its main tenets (e.g., the existence of realms of the human unconscious and the affective power of repressed psychological material). Yet one has to wonder if different schools of psychotherapy would not achieve equal success with the drugs in their own theoretical framework. Considering that *set* (the psychological milieu, including the client's and therapist's expectations and goals) and *setting* (the physical environment) are known to have a powerful effect on the texture and outcome of a psychedelic session, this seems likely.

A final limitation is that psychedelic drugs have been suppressed so long that modern psychotherapists are possibly inclined to misconstrue that these are strictly maintenance medications, as opposed to psychotherapy enhancers. Thus Grinspoon and Bakalar (1986) emphasized that "it is a misunderstanding to consider psychedelic drug therapy as a form of chemotherapy, which must be regarded in the same way as prescribing lithium or phenothiazines." Instead, it is more like "a hybrid between pharmacotherapy and psychotherapy" (Grinspoon & Bakalar 1990) that incorporates features of both. That psychedelics have unique and dramatic effects in psychotherapy is probably one of the reasons that mainstream psychotherapists ignore or reject them. They believe that to incorporate these drugs into their therapy techniques would require too great a degree of adjustment and accommodation. This is more or less true for the classic psychedelics. However, a more viable alternative may exist in a subgroup called *entactogens*. The following section elaborates.

ENTACTOGENIC PSYCHOTHERAPY

Entactogenic Drugs Defined

As noted above, there are two major types of psychedelic drugs: indole derivatives and phenylalkylamines. The latter has a subgroup called phenylisopropylamines, including amphetamine analogues of mescaline, a methoxylated phenylethylamine. Among these methoxylated amphetamines are some, such as MDA (3,4-methylenedioxyamphetamine), that seem to be only peripherally psychedelic (Grinspoon & Bakalar 1979:25):

> At moderate doses MDA . . . produces feelings of esthetic delight, empathy, serenity, joy, insight, and self-awareness without perceptual changes, loss of control, or depersonalization. It seems to eliminate anxiety and defensiveness; it has been described as inviting self-exploration where LSD demands it and as reducing the need to aggrandize the ego. Like LSD, MDA brings back lost childhood memories and also produces the condition that has been described, in a phrase borrowed from hypnosis, as age-regression: the MDA user actually feels himself to be a child and relives childhood experiences in full immediacy, while simultaneously remaining aware of his present self and present reality.

These features seem to indicate a special role for MDA apart from classic psychedelic drugs while retaining a number of their therapeutic benefits. It was, in fact, the subject of an interesting trial to assess its viability in the treatment of depression. Friedhoff and colleagues (1958) administered the drug to 25 patients and a placebo to a control group of 12 patients, all of whom were hospitalized for "serious depression." Both groups were treated for an average of two weeks, with a range of 10 days to six weeks. Their response was evaluated using a 38-item rating scale devised for the study. Doses ranged from 30 to 300 mg daily administered in divided doses, usually three times a day. It was found that the mean score of the patients on placebo was unchanged, while the drug patients showed a significant drop in their depression ratings. The statistical data accorded with a clinical impression of improvement in 76% of the drug group, as compared with only 24% of the placebo group. However, some of the patients who showed an improvement relapsed within a few days when the drug was discontinued. No indication of concurrent psychotherapy is mentioned.

Though the behavioral effects of MDA seem different from those of LSD, the prototype psychedelic, it reportedly has a similar chemical-structure activity. According to Nichols (1986) it is a biologically active compound having two optical isomers. Generally, such compounds have only one active isomer, or one that is more active than the other. With MDA, however, both isomers are active and each has different biological effects. It has been found that MDA's levo- or R-(-) isomer has LSD-like properties in laboratory animals, while its dextro- or S-(+) isomer is more like amphetamine. Thus MDA is technically a psychedelic drug.

This is not the case with MDA's N-methyl derivative MDMA (3,4-methylenedioxymethamphetamine). The addition of a methyl group to the molecule's nitrogen chain abolishes the psychedelic action of its levo-isomer. Yet MDMA remains biologically active and has only slightly less potency than MDA. Nichols (Nichols & Oberlender 1990; Nichols 1986) therefore concluded that MDMA is both chemically and behaviorally a different type of psychoactive drug that deserves its own nomenclature. Because its primary effect at therapeutic dose levels "seems to involve enhanced closeness and communication with others, accompanied by positive changes in feelings and

attitudes" (Nichols & Oberlender 1990), he proposed the term "entactogens," derived from Greek and Latin roots connoting an ability to "touch within." In his opinion this is more accurate and practical than calling such drugs "empathogens," a term loosely adapted by others from the English root word "empathy," especially since "people invariably dislike hearing the word 'pathogen,' which clearly stands out when empathogen is pronounced" (Nichols 1986).

Social History of MDMA

Though MDMA has sometimes been described as a "designer drug" invented by modern chemists to circumvent drug control laws (e.g., *Time* 1986), it was discovered in 1912 by researchers at the Merck pharmaceutical company of Germany, who shelved it after patenting it in 1914. Research resumed in the 1950s when the U.S. Army commissioned secret studies on its toxic effects in laboratory animals at the University of Michigan. Not until 1976 was it introduced into clinical practice by psychotherapists on the West Coast and several months later adopted by therapists on the East Coast. The first report of its pharmacological activity in humans (Shulgin & Nichols 1978) made no mention of its psychotherapeutic applications, which continued unpublicized until the mid-1980s.

Most published papers on clinical work from this period are by psychiatrist George Greer and his wife Requa Tolbert, a psychiatric nurse and fellow therapist (Greer 1985a, 1985b, 1983; Greer & Tolbert 1990, 1986). Their predecessors in the therapeutic use of MDMA included Leo Zeff, the first psychotherapist to use the drug extensively for this purpose beginning in 1976. Using concepts and techniques derived from Grof's psychedelic research, the peyote rituals of Mexican Huichol Indians and other sources, Zeff reportedly "had conducted hundreds of MDMA sessions and had achieved dramatic results without complications" (Greer & Tolbert 1990). But because "he had done his work away from the public eye and had written nothing about it," Greer and Tolbert "saw a need both to offer sessions and to document the results so that the research community would learn about the potential of MDMA as a pharmacological catalyst for psychotherapy." The procedures they established to explore this application were "reviewed and approved by a peer review panel of psychiatrists and a psychologist who were experienced with the use of drug-assisted psychotherapy and with the effects of MDMA."

A summary of their findings based on work with 80 patients between 1981 and 1985 and a two-year follow-up period affirms that the optimal therapeutic dose for men is apparently 100 to 150 mg and for women from 75 to 125 mg (Greer & Tolbert 1990). All patients were carefully screened before being accepted and fully informed in advance of the drug's effects, including possible uncomfortable side effects, such as blurred vision, muscle tightness of the jaw, occasional vomiting during the session, and insomnia or drowsiness and fatigue on the following day. Depression and/or anxiety were also sometimes experienced as patients confronted and worked out pertinent issues. One and a half to two hours after oral ingestion a "booster" dose (usually 50 mg) was offered to extend the peak effects an additional hour; the entire experience normally lasted no longer than three hours, not including discussions before and after the sessions. "Since dehydration was a common effect, water was offered periodically." Psychotherapeutic interactions were rarely initiated during the sessions. Afterward the therapists sought to "facilitate a smooth transition back to the usual state of consciousness" rather than interpreting the sessions. In some cases patients took MDMA with a spouse or other significant person in their lives. About 90% "had powerful and generally positive and useful experiences." Greer and Tolbert (1990:33-34) concluded the following:

> From our own observations and those of others, we believe that, in the right circumstances, MDMA reduces or somehow eliminates the neurophysiological fear response to a perceived threat to one's emotional integrity. . . . With this barrier of fear removed, a loving and forgiving awareness seemed to occur quite naturally and spontaneously. . . . [Patients thus] could reassess any aspect of their lives and relationships that they chose, from the broader perspective of security and love, rather than from one of vulnerability and fear. With the fear removed, a corrective emotional experience could occur, and it seemed natural and easy for most people to begin to trust the validity of their own unfearful feelings, as well as those of a significant other who was experiencing the same state with them.
>
> Because MDMA did not distort perception, thinking or memory (except in doses well over 100 to 150 mg), the learning that took place during the session often became consolidated and applied to patients' everyday lives long after the session had ended.

Concurrent with its use by psychotherapists, MDMA became popular with "recreational users" under street names such as *Adam* and *Ecstasy* or its homonym *XTC*. When this was discovered by the news media in 1985 a series of highly sensationalized and frequently inaccurate news reports resulted (Riedlinger & Riedlinger 1994). In December 1986 the U.S. Drug Enforcement Administration (DEA) placed MDMA in the highly restrictive Schedule I on a permanent basis even though its own administrative law judge, who presided at three public hearings on the matter, ruled decisively that MDMA more properly belongs in the less restrictive Schedule III (Young 1986). This effectively ended all clinical use of the drug along with human trial research.

The DEA's principal justification was MDMA's alleged similarity to other drugs considered neurotoxic, with special emphasis on a report by researchers at the University of Chicago who administered MDA in massive doses

intravenously to rats. When sacrificed and autopsied some of the rats were found to have sustained what appeared to be damage to some of the nerve receptors in their brains. But the researchers warned explicitly that "given differences in species, dose, frequency and route of administration, as well as differences in the way in which rats and human beings metabolize amphetamines, it would be premature to extrapolate our findings to humans" (Ricaurte et al. 1985). This ambiguity resulted in a "torrent of serotonin-related research" on MDMA (Shulgin 1990) that has so far failed to fully explain the drug's mode of action, though it has helped resolve the crucial question of its possible neurotoxicity.

MDMA's Mode of Action and Safety

That MDMA is apparently serotonergic was first noted by Nichols and colleagues (1982), who introduced it in vitro to homogenized rat brains and then measured the release of serotonin from the synaptosomes. Elevated levels were detected, thus suggesting that serotonin release may play a role in MDMA's pharmacological activity. Subsequent research appears to confirm the drug's serotogenicity. However, as with serotonergic antidepressant drugs, the specific mode of action is uncertain. In any case, MDMA's use in psychotherapy to stimulate positive feelings, such as openness and empathy, would seem to recommend a possible clinical role in treating depression. This was initially proposed by Riedlinger (1985) in her discussion of MDMA's positive isomer activity and consequent release of serotonin in the brain:

> If [the serotonergic connection is] so, its short duration of effect would seem to indicate that MDMA is both effective and efficient as a drug for the medical treatment of depression. It works in a matter of hours instead of days or weeks and is effective when administered infrequently (e.g., in weekly or monthly dosing intervals), thus reducing the potential for troublesome side effects. This compares favorably to the multiple daily dosing required for *all* of the currently available legal drugs that can be prescribed for treating depression (e.g., tricyclic antidepressants, MAO inhibitors and lithium carbonate), which often take several days or even weeks to produce antidepressant effects and frequently cause lasting troublesome side effects. Compassion for the victims of depression, in addition to the evidence of MDMA's serotonin-releasing effect, should compel further research to clearly establish if MDMA is indeed an alternative antidepressant.

Unfortunately, further serious investigation of MDMA as a serotonergic antidepressant agent was sidetracked when the DEA placed it in Schedule I. The research emphasis then shifted toward exploring its toxicity rather than its therapeutic benefits (Shulgin 1990). While undoubtedly true that the question of neurotoxicity requires careful study, it seems clear from the body of data now available from numerous animal studies (mostly with rats) that MDMA's alleged neurotoxicity to serotonergic nerve terminals is a dose- and/or frequency-dependent phenomenon (Gibb et al. 1990; Schmidt & Taylor 1990; Davis, Hatoum & Waters 1987; Schmidt, Lynne & Lovenberg 1986). At lower concentrations it appears to produce serotonin reuptake inhibition, whereas massive serotonin efflux or release from vesicular membranes with consequent serotonin depletion and neural toxicity is triggered only at higher concentrations (Rudnick & Wall 1992).

Other drugs commonly used in therapeutic applications likewise produce neurotoxic effects in high concentrations. Two notable examples are the widely prescribed medications fenfluramine (Barnes 1989) and fluoxetine (Whitaker-Azmitia & Azmitia 1990). According to Grob, Bravo and Walsh (1990), MDMA "may be significantly less toxic" than fenfluramine. Ironically, animal research with MDMA seems to indicate that even its high-dose neurotoxicity can be minimized by the concurrent administration of fluoxetine (Schmidt 1987; Schmidt, Levin & Lovenberg 1987). One recent report by McCann and Ricaurte (1993) appears to suggest that fluoxetine pretreatment in doses of 20 to 40 mg does not compromise MDMA's therapeutic effects and furthermore decreases postsession insomnia and fatigue, though increased nausea and vomiting occurred. Fluoxetine is probably unnecessary when MDMA is administered in low to moderate therapeutic doses of 75 to 150 mg, without boosters, no more frequently than every two weeks.

It should be emphasized that almost all of the foregoing data on MDMA's neurotoxic effects are derived from animal studies. Far fewer studies have been done on its neurotoxicity in humans because human trial studies have been virtually prohibited since 1985. Its record of relative safety is therefore primarily epidemiological. For example, Dowling (1990:63-64) notes in a discussion of MDMA and the entactogen MDEA (3,4-methylenedioxyethamphetamine) that "from 1977 to 1985 the Drug Abuse Warning Network (DAWN) reported only eight admissions to emergency rooms, across the United States, for treatment of individuals who claimed they had taken MDMA. . . . When one considers that the prevalence of MDMA use has been estimated at 10,000 doses nationally in 1976 to more current estimates of 30,000 doses nationally per month in 1985 (and perhaps as high as 30,000 doses per month in one city, as reported by the DEA), then the low number of emergency room admissions is remarkable, to say the least. Likewise, well-documented deaths related to the use of these two drugs are exceptionally rare."

The present authors were unable to find in the literature a single report of a life-threatening event induced by MDMA in a therapeutic setting. Of the few deaths in which MDMA has been implicated some were apparently idiosyncratic allergic reactions (Dowling, McDonough & Bost 1987) and most have been attributed to renal or cardiovascular failure induced by hyperthermia and dehydration af-

ter users ingested the drug and then failed to drink enough liquids during all-night dance parties ("raves"), mainly in England (Randall 1992). In other words, however great or small the possible health risks of MDMA, they are apparently avoidable if doses of known purity are administered in the lowest effective therapeutic dose range after carefully screening patients for known risk factors. This is consistent with the view of Grob, Bravo and Walsh (1990) that "fears of MDMA neurotoxicity may have been exaggerated" and that rigorous clinical trials with the drug in psychotherapy should be resumed. A cautionary response by Price and colleagues (1990) maintained that it was "premature to pursue clinical trials of MDMA in conditions that are not life-threatening." The present authors believe that both sides would be served by exploring the possible use of MDMA as an intervention drug for the stabilization and subsequent treatment of patients afflicted with severe and perhaps suicidal depression.

Treating Suicidal Depression with MDMA

The foregoing suggestion is based on a comparison of psychological patterns in suicidal people and MDMA's psychoactive effects. The following discussion of this comparison helps to clarify the role that proponents envision for MDMA in psychotherapy.

According to Hendin (1982), psychological characteristics of suicidal people tend to vary between different age groups, different cultures, different economic classes and so forth, as well as between men and women in each of these various categories. Many cases seem to be manifestations of alienation. The anguish of the suicidal person is frequently that of an exile. He or she feels totally isolated, singled out by fate to suffer hardships and endless frustrations. Such people often find it hard to deal with the conflicts and demands of interpersonal relationships. They therefore withdraw into a private, lonely world. Their justification might be that they feel unworthy of love or that others have abandoned them unfairly. In either case, the isolation often starts to feel irreversible. There seems to be no possibility of ever establishing meaningful contact with other human beings. Thus, according to the *Harvard Medical School Mental Health Letter* (1986) "among the immediate motives for suicide, not surprisingly, despair is the most common. In one long-term study, hopelessness alone accounted for most of the association between depression and suicide, and a high level of hopelessness was the strongest sign that a person who had attempted suicide would try again. Intense guilt, psychotic delusions, and even the severity of the depression were much less adequate indicators."

The study referred to, by Beck and colleagues (1985), reported that high ratings on the Beck Hopelessness Scale (BHS) successfully predicted 90.9% of eventual suicides in a sample of 165 hospitalized suicide ideators who were followed for five to ten years after taking the test. A subsequent paper regarding this study affirmed that "because hopelessness can be reduced fairly rapidly by specific therapeutic interventions . . . the assessment of hopelessness can potentially improve the prevention as well as the prediction of suicide" (Beck, Brown & Steer 1989). More recently, Beck, Steer and Brown (1993) administered the BHS along with several other psychiatric tests, such as the Beck Depression Inventory and the Dysfunctional Attitude Scale, to 908 psychiatric outpatients. It was found that while "past suicide attempt and hopelessness emerged as the two most important variables for identifying the suicide ideators," four sets of dysfunctional attitudes involving cognitive vulnerability, success-perfectionism, need to impress others and disapproval-dependence "were by themselves significantly related to suicidal ideation." The researchers concluded that "hopelessness itself might mediate the relationship between dysfunctional attitudes and psychopathology, especially depression."

Implicitly, not hopelessness per se but interpersonal attitudes related to depression are the root cause of suicide. To that extent, suicide might be considered an act of interpersonal frustration that seeks "to communicate misery and break out of isolation" (*Harvard Medical School Mental Health Letter* 1986). Alternatively (and more safely) this goal may be reached by means of guided psychotherapy. However, the recalcitrance of suicidal people is a problem for conventional psychotherapy. In order for the therapy to work, a positive, dynamic interaction must occur between the patient and the therapist (Strupp 1993; Henry, Strupp & Schacht 1990; Talley, Strupp & Morey 1990). The patient must be willing to communicate what is "going on inside." But someone who is totally consumed by strong feelings of alienation and hopelessness is likely to resist interpersonal contact and open discussion. Of course it is frequently true that patients hesitate to talk about personal problems at the start of psychotherapy and need several sessions before they "warm up" to the therapist or vice versa. But time is often a luxury that suicidal patients are unable to afford. They may be treatable over the long term with conventional psychotherapy, but first they must be stabilized or otherwise prevented from taking their own lives. Usually this means keeping a "suicide watch" on such patients and actively restraining them if possible.

Here is where MDMA can perhaps play a viable role, based on certain effects and their ramifications for guided psychotherapy succinctly described in a 1985 issue of the *Harvard Medical School Mental Health Letter*:

> Although MDMA has no officially approved medical or psychiatric application, a few psychiatrists and other therapists have been using it as an aid to psychotherapy for more than 15 years. It has now been taken in a therapeutic setting by hundreds of people with few reported complications. It is said to fortify the therapeutic alliance by inviting self-disclo-

> sure and enhancing trust. Some patients also report changes that last several days to several weeks or longer—better mood, greater relaxation, heightened self-esteem, and better relations with others. Psychiatrists who have used MDMA with patients suggest that it might be helpful, for example, in marital counseling, in diagnostic interviews, or as a catalyst for insight in psychotherapy. Reports of therapeutic results are so far unpublished and anecdotal and cannot be properly evaluated without more systematic study.

Anecdotal reports by the hundreds of people who have taken MDMA in therapeutic settings are not totally irrelevant. Their testimonies indicate that certain psychological effects occur consistently across the broad spectrum of usage. This is evident in Adamson's (1985) collection of about 50 such testimonies. The foreword, by Ralph Metzner, observes that these firsthand accounts include words such as *ecstasy*, *empathy*, *openness*, *acceptance*, *forgiveness* and *emotional bonding* in reference to MDMA's effects. These are the opposites of terms often used to described the psychological distress of suicidal people: *anguish*, *alienation*, *recalcitrance*, *rejection*, *blame* and *guilt*, and *emotional withdrawal*.

Additionally, Eisner (1989) described several cases of MDMA-assisted psychotherapy in which depression is mentioned specifically as one of the symptoms alleviated. Among them is the story of a woman who suffered severe psychological trauma when she was abducted and tortured for several hours. After six months of intensive conventional therapy she described herself as "suicidal, at the end of my rope." Her psychiatrist, Joseph (Jack) Downing, then initiated MDMA-assisted psychotherapy. "For the first time," the woman reported (p. 59), "I was able to face the experience, go back and piece together what had happened." She said the drug "helped me regain some measure of serenity and peace of mind and enabled me to begin living a normal life again."

The value of MDMA is that it does not make its users feel better by transporting them into a naive state of bliss. They are not unaware of the fact that their lives have been burdened by negative thinking based on fears and anxieties. But MDMA seems to give them a different perspective for several hours by reducing their "defensiveness and fear of emotional injury" (Greer 1985a). It stimulates a *process* by which they are able to look at their problems more objectively and thus transcend a feeling of hopeless entrapment. Concurrently they feel more in touch with their positive emotions. This sustains them as the therapeutic process takes its course. The drug gives them both the courage to confront their emotional problems and the strength to work them out, often by enhancing their desire to communicate constructively. Numerous examples of this process are described in Adamson's (1985) book. One is the account of a 39-year-old woman who had been going through a period of guilt, self-doubt, and regret in regard to decisions she had made in the course of her life and her behavior in many relationships. After taking MDMA she reported (p. 91): "I now understand more clearly how I close myself up. I am grateful that I now know *experientially* that there is so much more to me, and to life, than I perceive on a daily basis." Similar stories are told by many others.

The particular value of MDMA for suicidal patients and, by extension, for patients with less severe forms of depression is basically twofold. First, it might be useful as an intervention drug. By providing immediate relief from overwhelming dark emotions, it seems likely that MDMA could help forestall the act of suicide or otherwise alleviate a patient's sense of hopelessness. This buys time for the drug's second major effect. It facilitates psychotherapy by helping to enhance the patient's trust and by inviting self-disclosure. As previously noted, the result is to fortify the "therapeutic alliance" between patients and their therapists. Furthermore, MDMA does so in a relatively short amount of time. According to Metzner in Adamson (1985:2): "One therapist has estimated that in five hours of one Adam [MDMA] session clients could activate and process psychic material that would normally require five months of weekly sessions." Needless to say, such accelerated therapeutic healing could well mean the difference between life and death for people in imminent danger of suicide.

Prospects for Entactogenic Psychotherapy

The DEA represents its prohibition of clinical access to MDMA as necessary to prevent the widespread use of a dangerous psychoactive drug allegedly devoid of any therapeutic benefits. This prohibition is maintained despite substantial indications that MDMA, used responsibly, is both safe and efficacious as an adjunct to conventional psychotherapy. The entire community of psychotherapists is thus denied a valuable addition to their current methodologies. Since most of them were not informed (or were misinformed) about the drug's unique potential to facilitate their practice, they have been slow to grasp the magnitude of what has been lost. But in fact they deserve to be angry about it, for themselves and for their clients. Grinspoon and Bakalar (1986:403), two proponents of the drug, stated the following:

> Whether or not MDMA fulfills its promise, other drugs may be developed that are useful in psychotherapy. It would be an error to put too many obstacles in the way of human research aimed at understanding the therapeutic potential of such drugs. The fundamental aim here is not chemotherapy, and the drugs are not primarily symptom-relievers but catalysts. Like psychotherapy, they depend for their usefulness on the sensitivity and talent of the therapist who employs them. To ignore the possibility of reviving the centuries-old but now neglected tradition of drug-enhanced psychotherapeutic healing would mean unnecessarily limiting the potential of psychotherapy itself to help people gain insight into their problems and bring more perspective into their lives.

NOTES

1. Many of the currently approved human trials with psychedelic and entactogenic drugs have been sponsored in part or facilitated by the Multidisciplinary Association for Psychedelic Drugs (MAPS), 1801 Tippah Avenue, Charlotte, North Carolina 28205, which monitors their progress and reports on new developments in a newsletter. MAPS also provides information and advice to researchers who want to submit applications to the FDA for new human trial studies.

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