### CHAPTER 1

# Madness, Consciousness, & The Spiritual Ground

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The stuff of the world is mind stuff.

SIR ARTHUR EDDINGTON

Looked at, it cannot be seen, Listened to, it cannot be heard, Applied, its supply never fails. LAO-TZU

LONG AGO, the youthful Plato and his mentor, Socrates, paced the streets of Athens pondering the nature of the soul and the enigma of "divine madness." Twenty-four centuries later, the questions they confronted still challenge the best of minds. What is human consciousness? Does it originate from a higher source? How is it connected to the physical body and to reality? What causes it to take a sane or insane form within a given individual?

Perhaps it will remain forever beyond the grasp of humanity to understand its own fundamental nature. But we are now edging closer to a unitive understanding of those realms of solitary experience, alternately revered or reviled, known in modern times as the psychoses.

This book defines psychosis as any one of several altered states of consciousness, transient or persistent, that prevent integration of sensory or extrasensory data into reality models accepted by the broad consensus of society, and that lead to maladaptive behavior and social sanctions.

This definition spans several modern diagnostic categories, includ-

ing manic-depressive (bipolar) disorder, schizophrenia, multiple personality disorder, brief reactive psychosis, "borderline" states, various kinds of chemical intoxication, and several less common deviations from socially defined reality. To the confusion of many, this definition also describes several potentially *adaptive* altered states of consciousness (ASCs), including premature spiritual realization, prolonged mystical rapture, and the effects of certain consciousness-altering drugs. The experience of some artists during moments of intense inspiration falls in the borderlands of the definition.

Western societies are increasingly divided about the value of these basic shifts in consciousness. Our failure to distinguish between malignant and benign psychotic ASCs in terms of cause, degree of regression, adaptive value, potential for spiritual growth, and treatment strategies bedevils both mainstream psychiatry and alternative schools of thought. Each errs in its own characteristic way by failing to recognize that various psychotic states of consciousness—although apparently similar—differ from each other in important ways that can be readily recognized.

The following two case histories illustrate these errors.

Tom is a nineteen-year-old grocery clerk whose mother brought him to see a marriage, family, and child counselor who advertised herself as a "holistic therapist." Tom was raised alone by his mother after his father committed suicide during one of several psychiatric hospitalizations. She said that Tom recently shaved his head and superficially cut his wrists in response to "orders from the mob," which he later revealed to be hallucinated voices. His mother said that Tom was an introverted child and had been a fair student until his last year of high school, when he began spending long hours alone in his room. His grades declined, and he quit school six months before graduation. He had no close friends. Because his mother often heard him murmuring and laughing to himself when he was alone, she was sure that he was using drugs, but none were ever found, and Tom denied drug use except for occasional experimentation with marijuana.

Tom's therapist found him to be a pale, thin, rather unkempt young man dressed in oddly mismatched clothes. Because she suspected poor nutritional habits, she requested that his family obtain a battery of blood tests and hair analysis to determine any metabolic deficiencies. She then recommended that he take large doses of several vitamin and mineral supplements. The therapist also noted that Tom lacked spontaneity and spoke in an expressionless voice, although he was polite. He had great difficulty in making minor decisions and seemed to be too distracted to discuss his life issues with her. When asked about career plans, he said he wanted to be a psychologist, but had no idea how to achieve that goal. He often smiled during serious moments of their conversation, but when she asked what was funny, he rambled off the point.

Tom's therapist concluded that he was "tense and emotionally constricted," and needed to "loosen up and get in touch with his repressed feelings." She felt that his symptoms represented "blocked emotional energy" from early in life, or possibly from a past lifetime, and that this energy needed to be released if Tom was to be free from his symptoms. After teaching Tom a relaxation technique, she engaged him in a series of "rebirthing" experiences that included deep and rapid breathing and suggestions for visual imagery that simulated his passing through the birth canal. She also prompted Tom to strike a mat with a soft bat while shouting how angry he was at his father for abandoning the family when Tom was five years old. Tom was instructed to practice the relaxation technique and concentrate on his breathing at least once a day.

Tom cooperated with the therapy, but seemed dazed and restless following the first of these sessions. When he returned for his next appointment, he was initially distant, but then coolly told his therapist that he planned to kill her because she was "in cahoots with the mob to steal my brain." When she picked up the phone to call for help, he bolted from her office. Later that day he was apprehended by police when he threatened to jump from a freeway overpass into oncoming traffic.

The next case illustrates how a similar therapeutic error can occur on the opposite end of the spectrum.

Tina is a successful thirty-six-year-old trial lawyer who sought help from a psychiatrist when she began having panic-like feelings that ordinary events in her life were unreal, as if her surroundings had somehow changed or she were dreaming when she was awake. At other times, she felt that her way of perceiving her own thoughts and feelings was different from usual. As she put it, "It's like I'm

losing my identity." On two recent occasions, she felt herself to be outside her body, during which she could see her physical body resting immobile at a nearby location. She also described several recent dreams that later came true, including one especially vivid and detailed dream in which a close friend was seriously injured in a skiing accident. This information was unwanted and frightening to her, and she feared that she was going insane.

Tina was in the midst of an acrimonious divorce from a marriage that she entered "to please my parents." She was also uncertain about the future of her career in law and was considering renewing a lifelong ambition to write children's books. Having been raised a strict Catholic, she had undergone a spiritual crisis several months earlier when she began a program of yoga and meditation that led her to question her lifelong beliefs in the religion of her birth. However, she recently stopped attending her meditation classes and simultaneously increased her daily meditation time from forty minutes to two or three hours. Shortly after this change, she noticed that she was unusually sensitive to bright lights and loud noises.

Tina's psychiatrist made no comment about her meditation practices, but advised her to begin psychoanalytic psychotherapy with him. He prescribed a small dose of Valium to take when she felt an anxiety spell coming on. Initially, Tina began to feel less anxious, but during her fourth session with the doctor, she suddenly informed him that she had died and gone to hell. She meant this literally, adding that the world was collapsing upon her from all directions and that she had been abandoned by God. She spoke of vague surges of "heat" flowing upward from her pelvis, through her body, and into her head, where they would leave colorful "trails of light." She also felt that there were demonic "presences" trying to possess her, although she was able to say that she knew these were not real. When she threatened suicide to end her turmoil, the psychiatrist felt he had little choice but to commit her to an acute psychiatric hospital.

In the hospital, Tina was given Haldol, an antipsychotic medicine. Within a few days, she no longer spoke of being threatened by demons, the bursts of inner heat and light had subsided, and the frightening feelings of unreality had ceased. But she also complained of feel-

ing dull-witted and constricted in feeling, "like I'm dead inside." She also complained that she could no longer recall her dreams, and that she could not concentrate on meditation, which she abruptly ceased altogether. Although her psychiatrist gradually tapered the dose of Haldol, the most disturbing of her symptoms did not return. Yet for months afterward, Tina complained of periodic anxiety attacks, "as if something evil is threatening me from within," and unaccustomed episodes of depression, "as if I've lost something very important."

After six months of psychotherapy that focused on her childhood relations with her parents, Tina felt that she was not getting to the root of her problem and quit therapy. Her anxiety and depression progressively worsened, and she was admitted to the hospital on two more occasions after attempting suicide.

Both Tom and Tina showed clear manifestations of a psychotic ASC. Both found their way to healers whose assessment and treatment fit the accepted paradigms of their particular disciplines, but whose responses were unsuited to the symptoms with which they were confronted. Although it could be argued that each patient would have been better served if he or she had consulted the other's therapist, I propose that a healer who could combine *both* ways of thinking and apply them precisely would have come closer to the ideal. This chapter begins the process of uniting these diverse approaches.

#### CONSCIOUSNESS: TWO VIEWS

Consciousness is difficult to define but impossible to overlook. It is the within of us, our essence, the basic felt vibration underlying each experience, the receptive self onto which the senses project their worldly data, the I who observes the I who observes the I . . . We feel it directly in ourselves, recognize it in our fellow men and women, infer it in animals, suspect it in plants, and wonder as to its presence in all creation.

Paradoxically, consciousness seems private, our own. Yet when we behold its vital spark flicker in the eyes of another, we acknowledge it to be the common bond of humanity, a link that affirms an intuitive sense of oneness shared by all who explore it with an open heart. In a sense it seems earthly, bonded to our bodies and brains. Yet many people have compelling experiences that suggest it is much subtler and deeper than the laws of physics or neurology, no matter how refined those may become.

In order to better understand madness as a manifestation of consciousness, we need to first review two historically conflicting views of how our minds and bodies interact: the *material*, and the *transpersonal*. These views split science from religion and also divide Western and Eastern worldviews. The material view elevates the physical brain to a primary position, with consciousness its accidental by-product. The transpersonal view regards consciousness as primary, with the brain its humble servant in the physical world.

Materialists regard consciousness as an intangible effect of neurological activity, an impotent fellow traveler passively following the playby-play action in the synapses of the brain. Some even think of the brain as *secreting* the mind, similar to the way kidneys secrete urine. Accordingly, materialists classify humanity's spiritual intuitions as superstition, thereby denying them status as "reality." Other casualties are free will, survival of personal identity after death, and paranormal events such as telepathy, all of which are explained away as grandiose illusions spawned by a wish to deny the impermanence of life and its mechanistic character.

Superficially, the evidence for the materialist's stance seems sound. After all, when a blow to the head temporarily disrupts brain function, consciousness—at least self-consciousness—seems to disappear, not go somewhere else to wait. And when parts of the brain are altered by surgery or drugs, consciousness is likewise altered in ways that are fairly consistent from person to person. Therefore, the materialistic argument concludes, mental events slavishly follow brain events. No brain, no consciousness—period.

Despite its surface appeal, this materialist view is seriously flawed, for it cannot explain how a physical brain alone could generate events of greater vitality and superior action to itself. Although it is beyond the scope of this book to delve into the complexities of the mind/brain problem, it can briefly be said that the amazing sophistication of modern physics has not explained how even the simplest form of self-awareness, creativity, or intuition could be generated from molecular activity in any biological organ, let alone the richness of human spirit as embodied within such personalities as Beethoven or Einstein.

Transpersonal theorist Stanislav Grof offered an analogy that exposes the weakness in the materialistic view of the mind/brain relationship. Grof likens the brain to a television set, with the quality of the picture and sound critically dependent on the proper functioning of every component. A malfunction in any part causes specific distortions in output, which can be remedied by replacing that particular hardware. A well-functioning mechanism is essential for a coherent program to be

viewed. Despite these undisputed facts, not even the most reductionistic scientist would offer this as proof that TV programs are generated by the television set. Yet this is exactly the argument mechanistic science presents in regard to the brain and consciousness.

Materialism also fails to account for "impossible" human abilities, such as telepathy, near-death experiences, out-of-body states, and dream precognition. To explain these common experiences in material terms would require science to revise most of the known laws of physics, but we have included arguments for their existence in chapter 14. Once materialists exclude consciousness from the cause-and-effect system that governs their universe, they create an embarrassing fissure that no amount of reductionistic science can fill.

#### CONSCIOUSNESS & THE SPIRITUAL GROUND

As an alternative, the transpersonal perspective affords us an opportunity to build a modern scientific theory of madness around a radically expanded view of consciousness. This view acknowledges consciousness as resident within all beings, rather than as a by-product of specialized types of matter called brains. This insight allows a healer to differentiate extraordinary states of consciousness that are more adaptive than the ordinary state from alterations that restrict one's ability to function in the world.

There is one important caveat, however. Although we can reasonably assert that consciousness per se originates from beyond the structure of the physical brain, we must not overlook the certain links between mind and brain simply because they are overinterpreted by materialistic science.

At the root of the transpersonal perspective is the idea that there is a deep level subjectivity, or pure spirit, that infuses all matter and every event. Be it called Brahman, Buddha-mind, Tao, or The Word, this living spirit was breathed into all being at the moment of creation as a manifestation of the divine nature. It is necessary for sentient life, because experience and awareness are possible only through the activating power that flows from this Source. In this book I will refer to it as the Spiritual Ground. This vital element fills the universe with Its presence, and It exists on a higher plane of being than material reality.

To speak of It at all, we must resort to paradox. It is eternal and beyond form, yet within It are transient forms and hierarchal levels. When we know It, we realize that It is beyond our knowing, an everpresent Mystery. It is the primary impetus behind all perception, thought, and feeling, so It must manifest itself in the world as *energy*. Yet It is not

identical to the four kinds of physical energy that can be measured with instruments, or even the more subtle energies known in oriental medicine as *ch'i* or *prana*. Intense inner contemplation exposes Its presence at the Ground of our being, but those rare adepts who glimpse It directly describe It as no-thing at all, a void, yet ultimately *real*.

Although the Ground is not material, if we are to speak of It, we must *pretend* that It is. In so doing, we reduce It to "it." But we may take this step only with full awareness that the ensuing analogy will be partially defective in its application. For our present purposes of practically applying transpersonal thought to worldly problems, I will extend the theory to conceive of the Spiritual Ground as a *field* of consciousness analogous to gravity, or like the electromagnetic sphere of influence surrounding a magnet.

A field is a *conditioning of space*, a pattern of force that affects matter and other forms of energy within its range. For instance, as a star accrues gravity by accumulating matter, the star adds its particular form to the background gravitational field. The gravitational field becomes part of what a star is. When the pattern of activity within a star changes, perhaps becoming more compact, the surrounding gravitational field always reflects that change. It also overlaps and is affected by gravitational fields of other nearby stars or planets. In the cosmos, as in consciousness, there are fields within fields within fields....

Similarly, we may think of the Ground as entering an intricate field relationship with the individual brain, imparting its fundamental vitality, its spark of life. Consciousness is everywhere, but each brain has a unique capacity to give it the shapes and forms that we call mind. As a developing fetus gains complexity, like a vortex the consciousness of the Ground flows and condenses into it, ensouling it, shaping it and taking shape from it in dynamic interaction. As the brain grows in size and complexity, so does its associated field of consciousness. As the brain differentiates into its various anatomical structures—cortex, midbrain, and so on—the human mind acquires its unique patterns and capabilities, whether they be mad or sane. Each specialized brain structure is linked with specialized mental functions; when either brain or mind changes, the other does, too. All the while, the mind remains an open system, constantly exchanging energy with its Source.

To look at this another way, for millions of years the brain has been evolving into a living link between matter and the Spiritual Ground. The brain imparts human meaning and purpose to the power of the Ground, enfolding within itself a very specialized awareness uniquely suited to thinking and feeling its way around this planet. In order to perform this task successfully, the brain must operate within

well-regulated limits, or the mind will regress into less highly evolved forms, as occurs during certain kinds of psychotic ASCs.

Here I must reaffirm the defects in the field analogy of consciousness. A star's gravitational field is *physical* energy that enters into a lawful, mathematically predictable relationship with the star and with other fields. Consciousness, however, is a finer, *nonphysical* force that nonetheless interacts with physical matter. Many have tried, but no one has ever clearly shown how that mysterious and complex interaction takes place. Yet, like a material energy field, consciousness sometimes appears to assume a vibrational or wave form, as we will see when we apply the analogy to psychosis later in this book.

But ultimately consciousness remains above the laws of physics. Its workings are not entirely predictable by any physical law or laws, and it is not limited by the same constraints as physical entities. This permits an open-ended view of human potential that allows for the *possibility* of extrasensory perception, survival of death, and even noncorporeal forms of intelligence that can influence human beings.

#### **CONSCIOUSNESS & SELFHOOD**

Life begins in blissful communion and simple unity with the Spiritual Ground. As a child's brain develops from conception throughout the early years of life, it gradually collects and condenses its own share of consciousness from the infinitely larger field that surrounds it.

The child's first essential task is to seal off this portion of consciousness from the Ground, to make it his own. In other words, he forms a *self*, the integrity of which is essential for sanity later in life. The child accomplishes this by forming a psychic "membrane," a self-boundary that allows an individualized sense of I-ness to separate from other selves and from the Ground. At first, this membrane is quite porous, allowing free exchange of energy between self and Ground. As a healthy child matures, his self-boundary expands, incorporating more and more consciousness within his own being. It is this condensed and walled-off portion of the Ground that actively engages the physical brain in mutual interplay.

But soon something is lost. As a child fortifies his self-boundary—a task necessary for survival—he further isolates himself from the Ground. He accomplishes this by gradually *forgetting*, by repressing his once open

and blissful communion with the Ground, which then becomes alien, not-self. In other words, the child's psychic membrane grows less permeable, hardened by his focusing attention on the physical world and away from his inner world, where he still feels the steady presence of the Ground. This process, called *original repression* by transpersonal theorist Michael Washburn, is never complete. Although the child may have forfeited immediate awareness of the connection, the Ground remains as deeply embedded in him as he is deeply embedded in it. The memory of his primal union with the Ground subconsciously remains, a source of both fascination and fear.

The self's gradual estrangement from the larger field of consciousness is a necessary and complicated process that is influenced by a child's genetic endowment, his relations with his parents and peers, and the physical health of his body. The psychic membrane surrounding his self will always remain semipermeable to the Ground, which is necessary to sustain sentient life. But this self-boundary can become vulnerable to catastrophic fragmentation during psychotic ASCs, allowing the Ground to inundate and rupture the self—a kind of psychic death. For this reason, it is important that we appreciate the relationship between the bounded self, the larger and unbounded realm of the Ground and the subconscious mind, (see Figure 1–1).

Our self-membranes should not be too tightly sealed, because we require constant inflow from the Ground to renew and sustain our vitality. The infinitely abundant Ground is our life force. When inflow from the Ground wanes, our awareness contracts and becomes colorless, passionless, and shallow. Conversely, most people welcome regular, controlled infusions of the Ground, which quicken experience and stimulate expansion of awareness and spiritual growth. We recognize these as energetic moments of well-being, inspiration, and occasionally extrasensory perception.

Altered states of consciousness change the permeability of self-boundaries. Some psychotic ASCs dramatically *increase* the flow across these psychic membranes, allowing uncontrolled infusions from the Ground to intoxicate an unfortified self. When this occurs, the awesome force of the Ground first excites the subconscious sphere, causing a person to feel unfocused anxiety and inner restlessness. If the inflow goes unchecked, the more strongly bounded core self is overwhelmed, and thinking and feeling become distorted, such as in the case of Tom, described earlier in this chapter. Subconscious contents then intrude into awareness as hallucinations or "alien" thoughts. In contrast, excessive outflows *away* from the self lead to devitalized depressive states, such as those that follow mania and other hyperaroused psychotic ASCs.

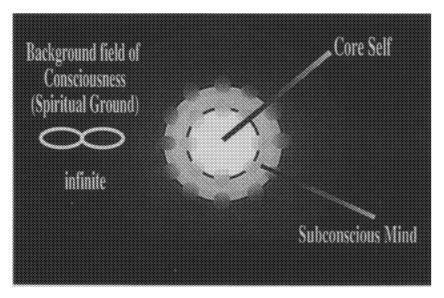


Figure 1 - 1: The relation of the self and subconscious mind to the universal field of consciousness (Spiritual Ground). Note that both psychic "membranes" bounding these structures are semipermeable, allowing partial entry of energy from the Ground first into the subconscious mind, which acts as a filter, and then into the more firmly bounded area of self-awareness. The inner self-membrane is relatively less permeable to the Ground than the outer membrane. These membranes may be thought of as allowing consciousness to pass in both directions. Therefore, the subconscious mind receives both influx from the Ground and repressed contents from the core self. The individual mind also affects the Ground, and potentially other selves. It is helpful to visualize these figures as three-dimensional spheres rather than flat circles.

Distracted by the lures of the material world, most of us become overly sealed off from this fundamental Source of our being. We can then approach it only though our intellects as an abstract theory. But some people—mystics, creative artists, psychic sensitives—do not have to be convinced of the reality of the Spiritual Ground, because they know its vitalizing presence directly, as they would an old friend. Still others feel the Ground to be a terrifying force threatening to overwhelm their defenses like a rampant floodtide, bearing their vulnerable selves into madness.

Many people who follow a spiritual path practice techniques to gradually reopen their self-membranes to the Ground in a controlled way. This is possible only for those fortunate individuals who have first developed a strong inner self through engaging life's trials and challenges with an open heart. If they follow their path with discipline and honesty, the natural human tendency toward spiritual growth will carry them beyond the need for individuated selfhood and allow them to reunite first with the collective consciousness of humanity and ultimately with the Source of their being.

But the spiritual path can be perilous, and sudden, unplanned openings are not uncommon, such as in the case of Tina, presented above. Psychotic-like states—spiritual emergencies—can fragment self-boundaries, permanently damaging the self if mishandled. Such relatively benign states are well known to experienced spiritual guides, who have at hand time-honored methods to stem the intoxicating influx of the Ground and allow the student to continue on his path. But because these crises superficially resemble pathological states, less experienced guides often confuse the two. This is a cardinal error. Many treatments that are appropriate for malignantly regressive ASCs are contraindicated for spiritual emergencies, and vice versa.

## ORDINARY & ALTERED STATES OF CONSCIOUSNESS

An ancient Oriental sage once queried: Last night I was a man dreaming I was a butterfly. How do I know that today I am not a butterfly dreaming I am a man?

As we frame our reply to this unsettling possibility, we might begin by observing the present status of our consciousness. To check this out, we would conduct a quick internal scan of our momentary experience to see if the overall pattern matches those qualities we associate with ordinary waking consciousness. We might further compare our state of mind with one or another altered state with which we are familiar.

If we are law-abiding citizens of a Western culture, this latter exercise will likely be a limited one. Western societies find virtually no use for most ASCs, tend to regard them as pathological, and are quick to rebuke those who make a point of pursuing them. Technological societies warn us to be wary of people who are prone to sudden trances, mystic raptures, and hallucinatory intoxications. Although spontaneous excursions into vivid fantasy worlds were a daily part of our early childhood experience, we learn to repress their memory and our residual craving to explore them as adults.

Safe and socialized, we are allowed but a few deviations from

ordinary wakefulness: dreaming sleep, nondreaming sleep, reverie (daydreaming), alcohol intoxication, sexual orgasm, and, under special circumstances, hypnosis and meditative states. Orthodox Western psychiatry assumes that a person who enters any other ASC is either high on drugs or seriously mentally ill. Such people are labeled psychotic if their ASC is one of several bothersome types defined in psychiatry's diagnostic manual. Even borderline cases are considered a little too abnormal to be trusted or taken seriously. And if such a person were to make a consistent argument against accepted reality? Well, that would simply demonstrate the diabolical cleverness of the psychotic mentality.

This is not the case everywhere. Eastern spiritual systems seem as intent on changing one state of consciousness into another as our system is on maintaining a single state. Sanskrit, an ancient language that evolved along with the practice of yoga, has some twenty nouns that can be translated into the single word "consciousness" in English, and it contains other terms to subdivide these.

Esoteric Eastern philosophies hold that the ordinary state of consciousness is neither innate nor even "normal," but simply one specialized tool for coping with ordinary environments and people. It is useful for some tasks, but inappropriate or even dangerous for others. Yet they do not disparage the ordinary state of consciousness. They recognize that it would be disastrous for a person driving on a highway to slip into a state of ecstasy that overwhelmed his senses. Some Eastern systems teach methods for controlling movement among ASCs, matching them to the individual's circumstances and ability to cope with alternate realities.

#### THE NATURE OF ALTERED STATES

If therapists or other helpers wish to meet mind to mind with psychotic people in a way that promotes healing, it is important that they be familiar with the attributes of altered inner experience. The following is an introduction to characteristics common to most psychotic ASCs, whether benign or malignant:

- There is a shift in the relationship between self and Ground so that the mind is felt to be somehow different from usual. A person may interpret this as blissful, terrifying, or any point in between.
- An ASC may shift a person either toward primitive modes of thinking and feeling (regression), or toward more advanced modes (transcendence), but either can be confusing to the individual.

- Attention turns away from ordinary concerns during ASCs. People may find it difficult to concentrate on matters that seem important to others. Conversely, they may seem deeply absorbed in what is ordinarily considered trivial.
- Space and time are reordered. A person may feel the flow of time speeding up, slowing down, or sometimes stopping altogether. He may perceive empty space as full of "energy" or subtle patterns, like some Van Gogh paintings.
- A person's perception of the material world changes, and objects appear transformed. During extreme shifts, hallucinations may emerge, and new orderings of reality become apparent. One's ability to compare these perceptions with those of the ordinary state—a process known as reality testing—may or may not remain intact.
- Perceptual filters may weaken, allowing too much sensory data to bombard a person's awareness, diminishing his ability to focus attention on one thing at a time; instead of being able to listen to one voice in a crowded room, he might perceive all voices with equal intensity. Or these filters may be fortified, resulting in his becoming intensely absorbed in a particular task or process.
- Depending on the ASC, it may be easier or harder for an individual to remember events from the past. Some memories may be changed from what they are in the ordinary state.
- Most ASCs change the way a person expresses himself and uses language. Rules governing the probability of associations change.
   One's progress along a chain of thought is less predictable sometimes poetically, at other times incoherently.
- There is a shift in the relationship between what is conscious and subconscious. Self-boundaries may either contract to reduce awareness, or expand into areas that are usually outside of awareness. In the latter case, unfiltered and unprocessed energies from the Ground can exceed an individual's ability to cope. Or he may be overwhelmed by emotionally charged material that he is unprepared to handle. In contrast, adaptive ASCs, such as dreams or states of creative inspiration, can afford access to valuable archetypal or mythical realms.
- A different logical system may replace the one a person ordinarily uses to reach conclusions about reality. He may then form beliefs that contradict what most people consider reasonable, but which sometimes contain extraordinary insights. Ideas that are obviously true in one state of consciousness may be absurd in another, and vice versa.

- Because of these alterations in perception and thinking, a person may discover unusual shades of emotional coloration in ordinary events. He may experience uncharacteristically intense emotions, or conversely, a flattening of feeling-tone. Emotions can range from all-encompassing love to primitive rage or even inner deadness, but they usually are not what society deems appropriate to the immediate worldly situation. This may lead to paranoid terror or insight into the arbitrary character of social conventions.
- Certain ASCs may lead a person to experience his field of consciousness as merging with other fields and exchanging information directly (telepathy). Or his awareness may seem to merge with physical objects (clairvoyance), or even leap ahead of the present moment in time (precognition). These paranormal events may convey useful information or cause confusion and fear.
- A person's sense of self may change to the extent that he disidentifies with his physical body. A new and larger selfhood may then incorporate animals, other people, the planet, or the whole universe. Depending on his preparation for this shift, either spiritual growth or psychotic loss of identity can follow.
- Nearly all ASCs change behavior. This may lead a person to be withdrawn and introverted, as in some forms of schizophrenia, or intrusively extroverted, as in manic states. Mystical ASCs usually increase compassionate feelings. Often the changes persist after ordinary consciousness has returned and may lead a person toward greater or lesser degrees of adaptation to his environment.
- Depending upon his ability to surrender to a particular ASC, a person may experience it as pleasant or threatening. Previous experience with ASCs facilitates the latter outcome.

#### QUALITY & QUANTITY OF CONSCIOUSNESS

Finally, any ASC can be characterized in terms of quantity and quality. The *quantity* of an ASC refers to the overall level of arousal, the "density" of experience, the units of information processed per unit of time. Small quantitative increases in arousal can be experienced as pleasant and controllable, but larger shifts can exceed the adaptive capacity of the individual and lead to mental disorganization.

For instance, in the early manic phase of the manic-depressive cycle, a person may feel vibrantly alive and creative. Information and ideas flow through him rapidly, inspiring him to bring them together in new ways. Life seems to be rich in meaning and full of possibilities, with too little time to carry them all out. As the ASC intensifies, however, his

thoughts start to race tumultuously. He grows irritable and impatient with the slower pace of people in his environment. Finally, what was initially a balanced quantitative increase changes into an unbalanced qualitative shift, and his thinking becomes disordered and incoherent.

Shifts in the *quality* of consciousness distort the degree to which the various components within an individual's brain and mind contribute to awareness. Ordinarily, there is a balance between thinking, feeling, instincts, drives, intuitions, and so on that allows us to operate as a coherent self. When this balance is disrupted by an ASC, one or more of these mental functions can overwhelm the checks and balances of the others, which may result in the loss of personal identity we call madness.

For instance, each brain substructure—cerebellum, hypothalamus, limbic system, cortex—makes a specialized contribution to the mind—motor skills, sexuality, emotions, thinking. In the ordinary state of consciousness, these maintain a certain ratio or balance in their contribution to our momentary awareness. Small, controlled shifts in one or another of these functions may enhance our mood or help us focus attention on a desired activity, like shooting a basketball or writing a book. But larger qualitative shifts can overwhelm the brain's delicate balancing mechanisms and lead to paranoid thinking, insatiable cravings, or wildly exaggerated emotional responses.

These two variables—quality and quantity of consciousness—can change independently or in concert during an ASC. When quantity increases independently, and the various components of the field remain in harmonious balance, the individual experiences a state of pure hyperarousal. Mild hyperarousal may lead to significant scientific or artistic accomplishment, or even spontaneous states of rapture. But because all mind/brain systems are seldom aroused to the same degree, qualitative shifts inevitably follow. These disrupt the delicate relations among mind/brain substructures—the "jammed computer"—and lead to disorders of thinking and feeling associated with extreme mania and schizophrenia.

The main point is that the common types of madness lie on one end of a spectrum of ASCs that includes creative and mystical states at the opposite end. The range of ordinary states of consciousness is more or less in the middle of the spectrum. There is a good deal of overlap, so that what one person experiences as an ASC may fall into the range of ordinary consciousness for another. For instance, the feeling of merging with the whole of creation may be a blissful daily event for a seasoned meditator, but that same experience could easily overwhelm a naive college freshman. Most societies judge ASCs as desirable or undesirable by the means an individual uses to achieve the state, the amount of control

he demonstrates over it, whether it affects him transiently or permanently, and his subsequent inclination to challenge the reality assumptions of his culture or engage in maladaptive social behavior.

For better or worse, most shifts of consciousness result in a reordering of reality. Because a particular culture's definition of psychosis cannot be separated from how it defines reality, we now turn to consider how a given individual's beliefs come to be accepted as reality or to be invalidated as imagination, delusion, or hallucination.

#### **REALITY—WHAT A CONCEPT!**

Charlie, a twenty-two-year-old unemployed baker, was hospitalized with a diagnosis of schizophrenia after he entered a school playground and frightened several children by telling them that the end of the world is close at hand. He stated that he did this because he is the center of a plot by satanic extraterrestrial beings to take over the world. They have been waiting for years for just the right moment, but have been thwarted by Charlie's steadfast belief in Christianity. Therefore, he concluded that he was a logical target for their insidious powers, which include turning plastic screws in his joints, whispering sacrilegious obscenities in his ear, zapping his brain with blue lasers, and inserting sexually tinged impulses into his mind. These diabolical beings had taken control of the hospital staff, who conspired to keep Charlie confined to prevent him from spreading the word.

Because Charlie somehow perceived me as uninvolved with this plot, he asked me to arrange his immediate release from the hospital, so he could "save the world before it is too late." When I told him that I did not think that was feasible, he informed me that I, too, had been possessed by Satan and was "one of them." Charlie articulated this belief with the utmost conviction and sincerity, and his behavior was entirely consistent with the urgency of the global threat to humanity as he perceived it. He found evidence of conspiracy in nearly every trivial event—a patient spilling coffee on a newspaper story about space travel, a stray cat that someone had named Luke (Lucifer), the number six appearing three times on a staff member's auto license plate. Whenever any-

one tried to demonstrate the irrationality of his belief, Charlie would fix him with the kind of haughty stare one reserves for people who have completely lost touch with reality.

There is little doubt that for Charlie this cosmic conspiracy was real. It explained the uncanny sensations that contorted his experience of himself and the world, as well as his caretakers' obstinate disbelief in what to him was obvious. Knowing that his unwanted sexual feelings were implanted from an alien source reduced conflict and helped him define the boundaries of his self, which seemed all too fluid. He felt important and powerful when he realized that he alone had been chosen to thwart this evil plot. And it is not altogether unreasonable for a person who repeatedly hears whispered obscenities coming from nowhere in particular to conclude that there are invisible demonic beings lurking in the vicinity.

For most of us, Charlie's grand delusion seems the quintessence of madness. Yet if we are to examine our own most cherished beliefs—personal, religious, or even scientific—we might find that many of them are also ways with which we explain our unique experience of ourselves in the world. We see that many of our beliefs, like Charlie's, help us view the world as a coherent whole that remains stable and makes "sense." Any belief that reduces uncertainty also relieves tension and helps us feel at ease about ourselves. We tend to summarily reject ideas that do the opposite. But unlike Charlie, we are able to comfort ourselves by finding others who experience the world in a similar way and therefore agree with us about what is real. Without this confirmation, we would be on no firmer ground than most people diagnosed as insane.

It is easy to understand how the idea that there is one true reality came to be accepted. After all, most people—especially influential scientists and politicians—share similar states of consciousness, so they tend to agree on what the world is like. Reality, therefore, is acclaimed by consensus. Alternative realities known to psychotics, mystics, and artists are, of course, distortions of that one real world, interesting though they may be. The young genius Sir Isaac Newton shared the consensual reality of his time when he described the universe as consisting of solid particles interacting lawfully and predictably within two force fields, called electromagnetism and gravity. That was how the world looked then, and to most casual observers it still looks that way.

Enter Newton's modern successors, the quantum physicists. Exit the comfortable notion of a solid, material, and predictable universe. First, the original two force fields were found to contain others—the strong and weak forces measurable only at submicroscopic distances.

Then the safe and solid atoms and molecules at the very foundation of reality were found to be made up of even smaller "particles" that, in turn, are not solid, either, but are insubstantial packets of energy, interacting with other fields in the universe in an eternal vibrational dance.

The physicist Sir Arthur Eddington knew this when he wrote that he was simultaneously sitting at "two desks." One was the familiar antique supporting his elbows, made up of hard, brown material. The other desk, equally real, was a shadowy field of energy whirling in mostly empty space. Here and there were local condensations that he had grown accustomed to calling atoms. These spun rapidly through a vastly greater emptiness. The shadow desk had no qualities of hardness or brownness, nor were his elbows more substantial. In fact, there was no "real matter" in either elbows or desk, nothing but a field of energies interacting with other fields of the universe.

Eddington's insight reminds us that our human brains, special though they may be, are composed of basic *physical* particles: molecules, atoms, electrons, mesons, and quarks—fields within fields. These particles interacting in the juices of our neurons and synapses are no more "solid" and behave with no more absolute predictability than they do in the cloud chambers and cyclotrons of the physics labs. So there is a constant interaction among the fields of our mind/brains and the fields of the external world, which isn't so external after all. In this strange new domain where everything blends with everything else, the indistinct self-boundary of the madman, and the mystic's voluntary surrender of personal selfhood, no longer seem so odd.

To confound matters even more, physicists inform us that the mere act of observing a quantum event inescapably alters how that event takes place. If we wish to remain consistent with modern science, we must allow for a potentially infinite number of possible realities to emerge from the various ways we interact with the world. Modern investigations of reality at the quantum level teach us that when we penetrate to the deepest aspects of nature, suddenly, as in a mirror, we meet ourselves. Or as the physicist James Jeans once exclaimed, the closer we look, the more the universe seems to be one great thought!

This is not to say that there is no world "out there," or that sensory perception is, as some Eastern philosophies hold, a thinly disguised illusion. No system that says everything is illusion holds up any more than one that says everything is absolutely real. Reason also fails to confirm the view that reality is *only* a construction of mind, that all you have to do is believe something for it to become true. As transpersonal theorist Ken Wilber points out, the predecessors of the human brain didn't evolve until about 6 million years ago, but the cosmos is about 13 billion years old. There were lots of things around before brains existed.

In a similar vein, the Swiss biochemist and philosopher Albert Hoffman argues that reality requires both a *transmitter*—signals from the external world—and a *receiver*—a subject who experiences by means of antennae formed by the senses.

The metaphor of reality as the product of a transmitter and a receiver makes evident that the seemingly objective picture of the exterior world that we call reality is in fact a subjective picture in our minds. This fundamental fact means that the picture is not the same for everybody. Everybody bears their own picture of reality produced by their own private receiver . . . The reality we experience is not a fixed state, but is the result of a continuing input of material and energetic signals from the external world and a continuing decoding process in the inner world, transforming these signals into psychic experience . . . It is only in ourselves that the creation becomes reality. Every human being is the creator of a world of his own.

Reality, therefore, resides in neither subject nor object, but arises at the intersection of time and space where subject and object meet. Emerging afresh at the moment the knower encounters the known, reality is neither a thing, nor an illusion, nor a projection of mind. It is an *event*. If we alter either subject or object, the event of reality itself is altered. We neither invent nor discover reality, but we participate in its invention *and* discovery. We can't be uninvolved.

It follows that any given reality is *state bound*—that is to say, dependent upon the state of consciousness, ordinary or altered, of the observer as well as the nature of the observed. If we wish to make judgments about reality events occurring in ASCs, we should keep in mind that our interpretation of any reality event is learned from other minds and from the consensus of society. We are shaped by other people who are as state bound as we are. So for our personal reality to become a meaningful *social* reality, we rely on consensual validation to determine which of many possible descriptions of the world we accept as true.

#### MADNESS & REALITY

Many behaviors judged insane are efforts by people in ASCs to share nonconsensual versions of reality in ways that profoundly disturb their associates. These communications are so disagreeable because successfully socialized people are usually convinced that the consensusreality events of their culture define the limits of possible experience. Psychotics frighten us when they remind us that those limits are easily surpassed.

To illustrate the power of the consensus to influence our ideas about what is real, imagine meeting a stranger at a bus stop. You find each other's company interesting enough to make plans to meet again, and you do so several times. But when you introduce your new friend to an older acquaintance, the latter gives you a puzzled stare and exclaims that he sees no one there. You try two or three more introductions, but each time you receive a vigorous denial that a third party is present, along with pointed suggestions that your vacation is definitely overdue.

At this point you may continue to see and converse with your consensually invalidated companion, but your confidence about your ability to discriminate reality from hallucination is likely to be severely shaken, and you may be reluctant to test the matter further. Still, the question of your new friend's reality is far from settled by his selective invisibility. Certainly a real event in consciousness has taken place. Were your older friends too quick in judging your nonconsensual experience as lacking an objective counterpart? How many opinions are necessary before you conclude that you are hallucinating rather than that they are missing something? This is the problem faced by a person in a psychotic ASC who cannot account for a solitary reality he is compelled to deny.

Living in a particular society conditions us to maintain a state of consciousness acceptable to its consensus. At birth human beings make little sense of visual or other sensory inputs. During the first several months of life, an infant reconnoiters the world with few preconceptions, finding magic and mystery everywhere, until he learns to see things in a way that gains the approval of most people in his culture. In so doing, the toddler gradually stabilizes one of many possible states of consciousness that fixes a system of *rules* for perceiving things. Events very early in life have some power to restructure rules while they are still flexible.

As the growing child interacts with his environment, these rules in turn direct the formation of *models* of how to make sense of the world. An example of model-matching is in Figure 1–2. To use a computer analogy, rules are hard-wired—built into the structure of the system—while models are soft-wired—part of the programming. Without rules, there would be no common ground of experience and no basis for communication with each other. Without models we could make no sense of a constantly changing world. The human mind needs its maps and models in order to tame complexity. To illustrate:

# LOVE PARIS IN THE THE SPRINGTIME

FIGURE I-2: At first glance, most people do not see that the sentence in the triangle contains two thes. It does not conform to a model from past experience, so the second the is not perceived. But a new model has now been created, so that when we look again, the superfluous the almost jumps off the page in its glaring inappropriateness. What we perceived was not the pattern of words on our retinas, but a model the pattern seemed to match. Research has demonstrated that the process of model matching is so powerful that nerve impulses traveling in reverse from the brain to the eye can actually alter the receptivity of the retina, so that it does not react to a pattern for which there is no model. If our cultural conditioning does not provide models to recognize certain events, we may simply not perceive them. We do not see what we are looking at so much as what we are looking for.

A person's rules of how he constructs reality are fixed at a very early age, but his models can be modified by new experiences such as psychotherapy. Rules can be altered only by changes in the anatomy or chemistry of the brain, such as occurs in severe psychoses. Transient ASCs, such as a mild marijuana high, merely alter models and cause a person to experience the world as "strange" for a while. However, prolonged ASCs like chronic schizophrenia permanently restructure a person's basic rules and so result in radically shifted models for reality. As the individual adapts to his ASC, what was initially an unfathomable world becomes modeled by these new rules, and he grows comfortable with a nonconsensual reality.

We can imagine the experience of a young adult who develops a psychotic ASC that renders him unable to match his sensory inputs with familiar models. Everyday events seem weirdly distorted and lose their consensual meaning. After a fear-ridden struggle to find new meanings, his ability to make sense of things is overwhelmed, and new models gradually coalesce into a delusional system. He desperately clings to these nonconsensual beliefs, which are his only certainty in a world gone mad.

#### EXPANDED REALITIES

There is another way that some ASCs can expand the limits of a narrowly construed reality. Not only can shifts in consciousness alter models acquired from social experience, they can also extend the bandwidth of sensory or extrasensory perception into realms for which we have never acquired models.

The world picture that our minds create is painted with only five colors. Each of our senses ordinarily responds to a restricted range of possible stimuli. Human eyes, for instance, process data only from a narrow channel of frequencies in the midrange of the electromagnetic spectrum, the whole of which includes invisible infrared and ultraviolet light, X rays, and cosmic rays. The world would seem radically different if our eyes were sensitive to another band of the spectrum. For example, if we could see the long waves of the radio bandwidth, we could see into distant lands. If our eyes were receptive to X rays, we could see through solid objects, which would seem semitransparent to us. Such a transparent world would then be as real as this nontransparent world is now.

Similarly, human ears are deaf to high-frequency vibrations that dogs hear easily, just as a dog's range of smell also far exceeds our own. The dog lives in another reality, constructed of canine-specific models for sounds and odors that would be incomprehensible to us. Similarly, some psychotic ASCs render people exquisitely sensitive to nearby high-tension electrical power lines or the fields surrounding fluorescent light fixtures. These extra inputs create subtle nonconsensual realities. The feeling of these "expanded bandwidth" ASCs may be easier to grasp if we imagine what reality is like for a dolphin sensing a tidal shift, or a migrating bird navigating by fluctuations in the earth's magnetic field.

During ASCs that render self-membranes relatively open to the Ground, some people experience extrasensory perception. This can be telepathic influence from other localized fields of consciousness, or even information about events far removed in time or space. Very few people reach adulthood with perceptual rules adequate to the task of making coherent models for these kinds of data, which then become disorienting.

The difficulties encountered by people whose psychotic ASC suddenly extends their perception into unmodeled realms parallels the ordeal of people blinded from birth by congenital cataracts who later in life have their sight restored by surgery. Although the operation may be technically successful, and coherent visual patterns fall on functioning eyes, many of these people are unable to make use of their newfound sight. Because they never formed the requisite models for perception, or even rules for acquiring new models, most of these people see only a chaotic jumble of light. For instance, when shown a triangle-shaped

block, newly sighted people are usually unable to identify its shape. But if they can touch the block, they recognize it immediately. Some find the whole experience so unpleasant that they ask to be blinded again.

Similarly, people from nontechnological cultures that have different perceptual expectations develop models that vary so much from ours that they may be thought of as living in a different world. For instance, the author Lawrence Blair wrote that when Magellan's expedition landed at the southernmost tip of South America, his massive ships were so far beyond the natives' experience that they were invisible to them, although the natives could perceive smaller landing ships. European explorers learned of this when the natives described how their village shaman, who was accustomed to dealing with unconventional realities, pointed out that the strangers had arrived in something that, although preposterous, could actually be seen if one looked carefully. We might consider such people psychotic if we failed to take their cultural heritage into account. James Fadiman and Donald Kewman offered the following thought exercise to illustrate this point.

Imagine yourself shipwrecked, exhausted, and hungry on an iso-lated tropical island. You manage to salvage a radio transmitter, only slightly damaged, with tools and spare parts to repair it. But when the local inhabitants, who know nothing of radios, find you working on it, they are glad to provide abundant food and shelter. However, it is difficult to convince them that you need the peculiar equipment. Their chief orders them to confiscate your radio to divert you from the fantasy that you can access unseen and powerful forces in ways that cannot be reasonably explained and that may offend the local gods. When they politely, but pointedly, ignore your demands about your radio, you become extremely upset and "difficult." To soothe you and keep you usefully occupied, the chief assigns helpful natives to instruct you in fishing and basket weaving in the hope that these sensible, constructive activities will supplant your dream world and convert you into a functioning member of their society.

Are radio waves "real" on that island? Not in a personal way. For unless the radio is fixed, they are not part of a reality event, only a "delusional" belief. Not in a socially meaningful way, either, for consensual reality requires two ingredients—personal experience and social validation—neither of which is present in the above situation. You had best attend to basket weaving or risk the fate of those hapless souls everywhere who are judged to have lost touch with reality. Expecting the natives to accept the reality of talking radio waves is as futile as a patient's expecting the staff of a modern mental institution to accept that he is in telepathic communication with demonic extraterrestrials.

In sum, reality depends upon the state of consciousness of the per-

son who perceives it, and upon how his perception fits with models built from his past experience. It is unwarranted to automatically assign a superior status to consensual reality. Some people experience nonconsensual realities in altered states of consciousness that represent events that lie outside the narrow bandwidth of sensory experience, such as telepathy or precognition. And some rare individuals learn to manipulate their inner rules and models of reality at will, affording them extraordinary personal powers.

But when an individual's personal reality is consistently at odds with social reality, he is usually at a great disadvantage and is likely to be judged insane. In the next two chapters we take a closer look at the subjective experience of people who cross the line into a homemade reality that lies outside the human world of useful notions, shared symbols, and socially acceptable conventions.