

INTRODUCTION: ANOMALOUS EXPERIENCES IN PERSPECTIVE

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Evolution . . . is a change from an indefinite, incoherent homogeneity, to a definite coherent heterogeneity. (Spencer, 1862/1991)

Tales of strange, extraordinary, and unexplained experiences and encounters with the “unknown” have long fascinated artists, scientists, and the lay audience. The period of the 19th-century European Romanticism was a time of deep interest in alterations of consciousness; such works as George Eliot’s *The Lifted Veil* featured reputed parapsychological phenomena as a central part of their plot. In the 20th century, the Surrealist movement paid special attention to automatic writing and drawing, altered states of consciousness, and dreams. As evidence of more recent popular interest in anomalous phenomena, one need look no further than to the enormous international popularity of such television programs as *The Twilight Zone* or *The X-Files* during the second half of the 20th century. At the beginning of the 21st century, popular interest in such topics as near-death experiences, purported parapsychological phenomena, and mystical events has remained very strong. This can be understood, in part, because many anomalous experiences seem to hold great significance for those who have them or even for those who just vicariously partake of them.

In contrast to the public fascination with these phenomena, traditional psychology has long neglected or even derided them. Indeed, anomalous experiences are examples of what postmodernists refer to as “the other”—those phenomena that have fallen between the cracks of contemporary mainstream psychology. However, we believe that psychology has achieved enough maturity and breadth that it can take a serious look at unusual but important experiences.

Before we proceed further, it is important to clarify how we use the term *anomalous experience*. The English word *anomalous* derives from the Greek *anomalos*, meaning irregular, uneven, or unequal, in contrast to

homalos, which means the same or common. An anomalous experience is irregular in that it differs from common experiences, is uneven in that it is not the same as experiences that are even and ordinary. Typically, it is also unequal in that it does not draw the same attention, at least in academia, as that given to regular experiences.

We define an *anomalous experience* as an uncommon experience (e.g., synesthesia) or one that, although it may be experienced by a substantial amount of the population (e.g., experiences interpreted as telepathic), is believed to deviate from ordinary experience or from the usually accepted explanations of reality. The focus of this book is on experiences, not on testing the consensual validity of such experiences. For instance, the possibility of verified parapsychological phenomena is briefly mentioned in chapter 7 under explanatory theories, but the focus is on the experiences people have, not on the external phenomena to which they may refer, nor on "unusual people" (see, for example, Dingwall, 1962).

Although there is some overlap, we distinguish anomalous experiences from altered states of consciousness (e.g., Tart, 1969). Whereas some of the former do occur during an alteration of consciousness (e.g., near-death experiences; see Greyson, this volume, chap. 10), anomalous experiences such as synesthesia (Marks, this volume, chap. 4) may be part of the ordinary state of consciousness of the individual. We also distinguish experience from procedures such as hypnosis or meditation, which may or may not produce a major alteration in consciousness.

We also contrast *anomalous*, a term that does not have any necessary implication of psychopathology, with *abnormal*, a term that usually denotes pathology. Notwithstanding the presence of anomalous experiences in case studies of disturbed individuals, surveys of nonclinical samples have found little relationship between these experiences and psychopathology (e.g., Greeley, 1975; Spanos, Cross, Dickson, & Dubrcuil, 1993). This is the case even in hallucinations, often used as a landmark of psychopathology (see Bentall, this volume, chap. 3). The relationship between psychopathology and belief systems that involve anomalous experiences is more complex because of the multidimensional structure of beliefs (Krippner & Winkler, 1996). Nonetheless, the various contributions to this volume make clear that holding such unusual beliefs as the reality of alien abduction is not an indicator per se of psychopathology (see Appelle, Lynn, & Newman, this volume, chap. 8).

Other disciplines have also used the terms *anomalous*, *anomalies*, and *anomalous*, but only to refer to seemingly unexplainable events (i.e., a demonstrable occurrence) rather than experiences (i.e., a psychological event that may or may not be associated with a demonstrable consensual occurrence). For instance, parapsychologists often use these terms to denote an event in which there is purported access to unavailable information, such as a dream report of an airplane disaster that coincided with an actual

event (e.g., Thalbourne, 1982). In an important article, the sociologist Marcello Truzzi (1971) wrote that anomalous phenomena "contradict commonsense or institutionalized (scientific or religious) knowledge"; they are "anomalous to our generally accepted cultural storehouse of truths" (p. 637). Similarly, the anthropologist Roger Wescott (1977) suggested that the word *anomalous* be used as a prefix to the name of any discipline dealing with so-called paranormal topics. Some of these topics, for instance the possibility of the existence of Bigfoot, do not necessarily involve anomalous experiences.

INDIVIDUAL AND CULTURAL IMPORTANCE

A striking aspect of some anomalous experiences is that, even when single and transitory, they are reported to have an enormous impact on the experient. An individual may undergo a change in values after a near-death or an anomalous healing experience (see this volume, Greyson, chap. 10; Krippner & Achterberg, chap. 11), or mystics may describe experiences that will also influence many people (Wulff, this volume, chap. 12). The attribution of personal meaning to anomalous experiences has been addressed by such writers as James McClenon (1994b), who referred to them as "wondrous events" (suggesting that they stimulated the development of religious ideologies). Daniel A. Helminiak (1984) called them "extraordinary experiences" (depending on whether they further the experient's "authentic growth"), and Rheea A. White (1995) referred to them as "exceptional human experiences" (noting their transformational potential in people's lives).

To determine that an experience is uncommon or anomalous, we have to consider the cultural framework in which the evaluation of the experience occurs. Many years ago, Ruth Benedict (1934) reminded us that what is normal (or pathological) in one culture may not be so in a different one. In a similar vein, in his book *Anomalies of Personality*, the Russian psychologist Boris Bratus (1988/1990), basing his argument on statistical averages, proposed that what is anomalous in one culture may be the norm in another culture (p. 4). He used the term *anomalous* in the sense of a personality characteristic that deviates markedly from a cultural norm.

Summarizing a number of surveys conducted in the United States, MacDonald (1994) concluded that age, education, gender, race, religion, and socioeconomic status influence the likelihood of reporting various paranormal experiences, and he attributed the differences to the "shaping of individual realities" (p. 36). MacDonald conjectured that "the reality of human experience is socially constructed and is therefore subject to variation depending on the social context" (p. 36). The sociologist James McClenon's (1994a) review of the literature on altered states of conscious-

ness and anomalous experience persuaded him that such traits as absorption, dissociation, fantasy proneness, and hypnotic susceptibility need to be considered to understand these states (see also Cardena, 1996). McClendon considered these traits to be "normal human capacities which have not been thoroughly studied in non-clinical populations" (p. 129). The contributors to this book point out that psychology has made progress in understanding these variables and their relationship to anomalous experiences. The focus of this book is psychological, but we should not forget that neurological pathologies, such as temporal lobe abnormalities or head injuries, can give rise to unusual phenomena (Cardena, 1997; George, 1995).

A BRIEF HISTORY

The study of anomalous experiences is currently a marginal area of concern for psychology, but it has not always been so neglected. Some of the topics covered in this book, including mystical and psi-related experiences, have figured in the history of psychodynamic psychiatry (see Ellenberger, 1970). In this Introduction, we give an overview of the psychological study of anomalous experiences, which has, at times, also included the study of anomalous events, cognitive misattributions, and related topics.

The first systematic inquiry into various anomalous experiences can be traced to the founding of the Society for Psychical Research (SPR) in London in 1882. Various notable scientists and philosophers gathered "to investigate that large body of debatable phenomena . . . without prejudice or prepossession of any kind, and in the same spirit of exact and unimpassioned inquiry which has enabled Science to solve so many problems" (Society for Psychical Research, 1882-1883, p. 2). Although the goals of the Society centered on testing claims of such purported psi phenomena as telepathy and clairvoyance (see Targ, Schlitz, & Irwin, this volume, chap. 7), it was also interested in the study of personality, dissociative phenomena, hypnosis, preconscious cognition, and related topics (Gurney, Myers, & Podmore, 1886). A few years after the founding of the SPR, a similar organization, led by William James and others, was established in the United States.

In contrast to the British and American Societies for Psychical Research, which are open to the general public, the Parapsychological Association, founded in 1957 and an affiliate of the American Association for the Advancement of Science since 1969, consists of professional members from different countries. This association is committed to looking for scientific explanations of anomalous events and experiences. (For a brief history of the scientific approach to parapsychological phenomena, see Rush, 1986.)

Within the realms of clinical and general psychology, William James (1890/1923) provided a comprehensive survey of the "Science of Mental Life, both of its phenomena and of their conditions" (p. 1). With his vast erudition and incomparable prose, James discussed anomalous phenomena in chapters dealing with more classical topics such as memory or the self. Our book follows the spirit of James's "radical empiricism," which includes the totality of human experience within the boundaries of scientific investigation. Our title, of course, pays homage to James's (1902/1958) classic volume, *The Varieties of Religious Experience*.

Besides James, F. W. H. Myers (1903/1961) attempted a bold integration of such areas as personality, sleep, and hypnosis, and other members of the scientific vanguard studied anomalous experiences. H. Sidgwick, Johnson, Myers, Podmore, and Sidgwick (1894) analyzed some 17,000 responses to the question "Have you ever . . . had a vivid impression of seeing, or being touched, or of hearing a voice; which impression, so far as you could discover, was not due to any external cause?" Affirmative answers were obtained from about 1 in 10 respondents and were categorized as sensory hallucinations (visual hallucinations were more common than auditory or tactile), ordinary sense perceptions, dreams, and what today would be considered eidetic imagery. It is striking how well the results of this study have withstood the test of time (see Bentall, this volume, chap. 3). Another landmark in the study of anomalous experiences was an inquiry into reputed psi-related phenomena, *Phantasms of the Living* (Gurney et al., 1886).

Théodore Flournoy (1901/1994), a psychology professor at the University of Geneva, wrote an in-depth case study of a medium who spoke in different voices, wrote in different handwriting styles, and used different names. Rather than positing deception or accepting the medium's claim of contact with the "spirit world," Flournoy made a case for multiple personality and produced a sophisticated interpretation of the psychodynamic foundations of the imaginary languages involved. A friend of Flournoy, Carl G. Jung (1902/1970), conducted a landmark study with another medium. Using a word-association test he had developed, Jung traced the origins of the names the medium gave him of her own "spirit guides" and of the "forces" that guide the universe. Jung terminated his work when the medium, Jung's young and enamored cousin, exhausted her flights of fancy. Later it was found that at least part of her mediumistic performances had fraudulent aspects (Ellenberger, 1970). Jung would later use his analytic psychology to explain UFO sightings and other unusual events (Jung, 1959).

The French clinical tradition at the turn of the 19th century was engaged in developing a general psychology of cognition, emotion, and experience that would be informed by abnormal conditions. For instance, Alfred Binet, mostly known to psychologists as the suffix of the Stanford-Binet IQ test, wrote an important treatise on the dissociation of identity,

On *Double Consciousness* (see Robinson, 1998). Another eminent French psychologist, Théodule A. Ribot, authored scientific studies on *Diseases of the Will* and *The Diseases of Personality* (see Robinson, 1998). The most lasting contributions to this area can be traced, however, to the landmark works of Pierre Janet, who researched and theorized on, among other topics, pathological and nonpathological forms of dissociation, hypnosis, memory, and the sense of time (see Van der Hart, 1998).

From the Germanic and Austrian traditions, clinicians also made important contributions to the study and conceptualization of anomalous experiences. Sigmund Freud's goal was to build a psychoanalytic theory that would "shed light upon unusual, abnormal, or pathological manifestations of the mind" (Freud, 1936/1984, p. 447), and we cannot fail to mention Karl Jaspers's undervalued *General Psychopathology* (1923/1963). Jaspers also aimed to understand abnormal and anomalous events, and his detailed descriptive analysis of experience provided an alternative to traditional psychodynamic and diagnostic classifications of psychopathology.

With regard to unusual beliefs or explanations, a student of Wilhelm Wundt, the Danish psychologist Alfred Lehmann, published a book titled *Superstition and Magic* (1898). In it, he focused on observational errors, such as the misinterpretation of optical effects, that were responsible for false belief systems. Lehmann granted that some extraordinary phenomena could not be explained away by errors of observation and would have to wait for a scientific explanation.

A few years later, the psychologist Joseph Jastrow collected a series of his essays in a book titled *Fact and Fable in Psychology* (1900). These essays provided conventional scientific explanations to anomalous beliefs. He pointed out how experience is refined, belief systems often influence interpretations of experience, and speculation takes precedence over authentication. In a later book, *Wish and Wisdom*, Jastrow (1935) posited that "wishful thinking" interferes with rationality, and he systematically applied this hypothesis to a number of anomalous experiences.

The decades-long dominance of behaviorism, launched by J. B. Watson's (1913) call to arms against the study of consciousness within psychology, explains why the more comprehensive program for psychology proposed by James and others did not progress for a number of decades. Even B. F. Skinner's less restrictive behaviorism did not study introspective reports on their own terms, but only as "verbal behaviors." The ascent of modern cognitive psychology as a dominant force in the 1950s and 1960s provided a valid framework to study mental processes (Gardner, 1985), but the study of subjective experiences, especially anomalous ones, had to wait even longer.

The first modern, systematic attempt to explain anomalous experience was *The Psychology of Anomalous Experience*, written by Canadian psychologist Graham Reed (1972, 1988). Reed studied unusual experiences from

a cognitive-experiential perspective. He discussed anomalies of attention, imagery and perception, recall, recognition, experience of self, judgment and belief, qualities of consciousness, and flow of consciousness. Although a slim volume, Reed's work deserves careful attention.

Leonard Zusne and Warren H. Jones (1980, 1989) treaded a similar path to that of Jastrow in their book *Anomalous Psychology*, the second edition of which was subtitled *A Study of Magical Thinking*. They contended that "magical thinking is wholly or partly at the root of any explanation of behavioral and experiential phenomena that violates some law of nature or suggests, without supporting evidence, the existence of principles, forces, or entities unknown to science" (Zusne & Jones, 1989, p. 13). To them, anomalous psychological phenomena are "those behaviors and experiences that seem to violate natural laws" (p. ix). Zusne and Jones (1989) presented a useful example of the relative aspect of some beliefs. When comparing bleeding from peptic ulcers and from stigmata, they wrote, "The difference between the psychophysiological normal and the psychophysiological anomalous is only a matter of statistical incidence and the cultural context within which the event happens" (p. 34).

Two recent books have analyzed various forms of faulty thinking that may give rise to the belief in unusual events. Thomas Gilovich (1993) discussed cognitive (e.g., misperception and misinterpretation of random data), motivational (e.g., "seeing what we want to see"), and social (e.g., biasing effects of second-hand information) determinants of questionable beliefs in anomalous events. Theodore Schick and Lewis Vaughn (1995) discussed a number of ways in which valuable information can be ignored or misrepresented while questionable forms of evidence such as tradition or the authority of the person making a pronouncement can be overvalued. They proposed a formula in which claims need to be clearly stated, the evidence for the claims must be looked at carefully, and any alternative hypotheses must be considered and rated according to certain criteria of adequacy. To their credit, Schick and Vaughn (1995) concluded that their "considerations should not be taken as the final word on the matters investigated here" (p. 281), and they pointed out that at least one parapsychology researcher had met some of the challenges from his harshest critics (p. 231). Ray Hyman (Hyman & Honorton, 1986), a noted critic of parapsychology research, agreed that some data obtained under controlled conditions "cannot reasonably be explained by selective reporting or multiple analysis . . . (and) the final verdict awaits the outcome of future . . . experiments" (pp. 352-353).

THE PRESENT INVESTIGATION

We decided to compile this volume because we share a fascination with these phenomena, and we believe that current empirical and concep-

tual developments in psychology can prevent it from falling prey to either naive scrutiny or automatic rejection. Like many readers of this book, we were partly drawn to a life of science and the study of psychology by the "big" questions that some anomalous experiences pose about the nature of reality and human consciousness: What is the relationship between our conscious experience and what we call the physical world? How does healing occur? What are the boundaries between dreaming and waking life? Is there credible evidence that thoughts affect the material world or can be transferred by extrasensory means? Does consciousness persist after death? What do mystical experiences tell us about the nature of reality?

Science may not have come very far in addressing the ontological status of these questions, but readers of the book will discover that psychology has much to offer in terms of proposing appropriate ways to obtain and evaluate evidence, characterize variables associated with these phenomena, and describe and investigate anomalous experiences. In turn, some anomalous experiences may have much to offer science in terms of clarifying its current boundaries and identifying how psychology, the neurosciences, and the social sciences can join hands to explain the "dome of many-colored glass" of life, to borrow Lord Percy Bysshe Shelley's beautiful image.

SUMMARY OF THE CHAPTERS

Part I of the book, devoted to conceptual and methodological issues, includes a chapter on the relationship among personality traits, anomalous experiences, and psychopathology, and one on the methodological opportunities and pitfalls facing the researcher of anomalous experiences.

In chapter 1, Howard Berenbaum, John Kerns, and Chitra Raghavan provide a useful model to understand peculiar sensations, experiences, and beliefs and their relation to anomalous experiences and psychopathology. Specifically, Berenbaum et al. propose that anomalous experiences can be systematically described in terms of the individual's level of awareness at the time of the experience (e.g., was the person fully conscious?) and of the ability to exert voluntary control over the onset and course of the experience. These experiences can be further classified according to the phenomenological dimensions of hedonic valence (i.e., pleasantness vs. unpleasantness), physical and metaphysical qualities (i.e., sensory focused or apparently crossing "barriers of mind, body, and space"), and any reported involvement with an individual or entity as a significant aspect of the experience.

Berenbaum et al. explore the ways in which a variety of factors, such as personality traits, trauma, and atypical patterns of brain functioning, may contribute to both psychopathology and anomalous experiences. They conclude their chapter with 10 recommendations for investigators who

wish to advance the knowledge of the relationship among anomalous experiences, peculiarity, and psychopathology.

In chapter 2, Ron Pekala and Etzel Cardeña examine methodological issues in the study of altered states of consciousness and anomalous experiences. They also define and discuss the strengths and weaknesses of various methods used to study inner experience. After reviewing variables that may distort or even invalidate introspective reports (e.g., forgetting and demand characteristics), the authors describe and give examples of introspective methods (e.g., thought sampling and depth ratings) that have been fruitful in the study of normal and anomalous experience. Because reports of anomalous experiences are often accompanied by little or no corroborating physiological data or physical evidence, it is important to have a balanced evaluation of the limitations, reliability, and validity of psychological methods to study experience. The second section of the chapter is devoted to the quantitative psychophenomenological approach developed by Pekala and his colleagues (Callagher, Kumar, & Pekala, 1994).

Although chapter 2 emphasizes research methodology, its treatment of potential threats to the validity and reliability of subjective reports should make it valuable to the clinician as well. Pekala and Cardeña also address the importance of *individual differences* in reference to who is most likely to report anomalous phenomena, and they propose specific steps to advance the study of anomalous experiences and altered states.

Part II of the book, devoted to reviews of various anomalous experiences, is grouped according to the categories described by Berenbaum et al. in the first chapter. The first section of Part II includes three sensory-focused experiences: hallucinations, synesthesia, and lucid dreaming.

Richard Bentall's chapter on hallucinations (chap. 3) provides an authoritative review of perceptual experiences that occur in the absence of an appropriate stimulus, yet have the full force or impact of the actual corresponding perception. Although auditory and visual hallucinations are most frequently reported, any sense modality can have its corresponding hallucinatory equivalent. Some individuals adapt to recurring hallucinations, whereas others (especially individuals diagnosed with schizophrenia) have difficulty coping with them, often becoming tortured and distressed.

Of particular interest to clinicians is that large-scale surveys have identified fairly large percentages of nonclinical populations who report occasional hallucinations that are not deleterious but are even, at times, seemingly beneficial. Contrary to common belief, hallucinations are not the exclusive province of psychopathology.

In chapter 4, Lawrence Marks addresses *synesthesia*, the phenomenon in which sensory perceptions in one modality, for instance, vision, are also experienced in another modality, such as taste and hearing. In weak synesthesia, a person may describe the major and minor keys of a musical piece as bright and dark, respectively. In the case of the considerably more

dramatic, phenomenologically distinct, and much rarer (fewer than 3 people per million) strong synesthesia, a musical note may stimulate a sparkling yellow color that appears very soon after the note is played and disappears slowly as the sound fades out. Strong synesthesia is vivid, intense, reliably evoked, and occurs automatically and involuntarily. Marks describes how these different kinds of synesthesia are subjectively experienced and expressed behaviorally and neurophysiologically. He also examines a number of explanations for synesthesia, including the theory that synesthetically related sensations represent the outcome of similarities in the neural coding mechanisms of different sensory systems.

In chapter 5, Stephen LaBerge and Jayne Gackenbach define *lucid dreaming* as dreaming while knowing that one is dreaming. The authors contend that this experience is clearly anomalous in comparison with the usual hallucinatory experience of nonlucid dreaming that characterizes most of our dream life. The research on the area is reviewed and different explanations for the genesis of lucid dreaming are surveyed, including information-processing models and psychophysiological perspectives.

Although lucid dreaming is a rare experience for most people, a variety of techniques have been advanced to induce it. This is a fortunate development, considering the reports that lucid dreams may have therapeutic potential in terms of nightmare management, resolving unfinished business in dealing with the death of a loved one, and in bypassing defenses and promoting personal insight.

The next section of Part II includes two types of "detachment" experiences: out-of-body and psi-related experiences.

In the out-of-body experience (OBE), people experience that their "self" or center of awareness is located outside of their physical body. According to Carlos Alvarado (chap. 6), this experience includes such features as sensations of floating, traveling to distant locations, and observing one's own physical body from outside the body. OBEs have been associated with fantasy proneness, hypnotizability, absorption, the ability to change imagery perspective, and dissociation. It is of interest that one's ability to have an OBE is correlated with one's ability to control the content of dreams or terminate them. These findings are consistent with what Alvarado terms a *psychological model* of OBE that describes this phenomenon as an imaginary or hallucinatory experience. Alvarado proposes a number of research directions and creative methodologies for inducing OBEs in the laboratory. In his concluding statement, which parallels our own stance, Alvarado proposes that future research and discourse on the topic not be "conducted solely in the context of a psychology of the exotic or the unusual, but rather in the wider context of the study of the totality of human experience."

In chapter 7, "Psi-Related Experiences," Elisabeth Targ, Marilyn Schlitz, and Harvey Irwin examine reported experiences of direct mind-to-

mind communication, knowledge of distant occurrences, information about the future, and direct mental influence on the environment (collectively referred to as *psi* by parapsychological investigators). These reports have been ubiquitous throughout history, but their frequency has varied in different times and locations. Many psi-related experiences take place in dreams and other altered states of consciousness. Theoretical explanations offered include the presence of cognitive deficits or misattributions, social marginality, psychodynamic needs, as well as the possibility that experiencers may be reporting veridical phenomena that must be taken seriously by mainstream science. Psi-related experiences are anomalous not because they are unusual in the population—they are not—but because these reported interactions between organisms and their environments appear to contradict mainstream science's constructs of time, space, and energy.

The alien abduction experience (AAE) is a type of "corporeal phenomenon" experience, and it is surely one of the most disturbing phenomena described in this book. As defined by Stuart Appelle, Steven Jay Lynn, and Leonard Newman in chapter 8, AAEs are characterized by subjectively real memories of being taken secretly or against one's will by apparently non-human entities, usually to a location interpreted as an alien spacecraft (i.e., an unidentified flying object, or UFO), and subjected to complex physical and psychological procedures. In recent years, an increasing number of reports have emphasized sexual intercourse with aliens, with some women claiming to have multiple offspring that are kept by the aliens.

The AAE is a dynamic, elaborate, and involved experience, rich in contextual detail, with considerable perceptual, psychological, cognitive, and physical concomitants. Many thousands of Americans have had an AAE, and this experience, as "nonordinary" as it appears to be, does not typically imply psychopathology. Aspects of AAEs have been explained in terms of fantasy proneness or sleep-related experiences (e.g., vivid imagery and sleep paralysis); as an attempt to escape from self-awareness through masochistic fantasy; and in terms of media influences, cultural influences, and suggestive psychotherapeutic influences that shape the memories and interpretations of the experience. In response to the claim that the AAE phenomenon does not suffer from a lack of hypotheses but from a lack of persuasive research, Appelle et al. outline methodological issues and problems that have limited research to date and make suggestions for how research and theoretical development can proceed in the future.

As a subcategory of "human transformation" experiences, chapter 9 discusses reports of past lives. Antonia Mills and Steven Jay Lynn define *past-life experiences* as the distinct impression that an individual holds of having been a different person in a previous time, and where the overlay of the past identity does not deny the current identity. The authors contrast cases that seem to arise spontaneously with cases experienced during hypnosis or following the intervention of a purported medium or psychic.

Mills and Lynn emphasize spontaneous cases of past-life experiences and evaluate explanations that include reincarnation, outright fraud, and extrasensory perception (i.e., telepathic or clairvoyant discernment of the nature of a deceased person). Another theory is that cultural forces can account for the genesis of past-life reports and their variability across disparate cultures. As in the case of alien abduction reports, fraud and chicanery can be ruled out in many, if not most, instances. The chapter concludes with a searching critique of the research base of this phenomenon and makes a number of creative suggestions for pursuing future research.

We conclude the volume with three chapters on "transcendent transformations": near-death, anomalous healing, and mystical experiences.

In chapter 10, Bruce Greyson characterizes near-death experiences (NDEs) as "profound psychological events with transcendental or mystical elements," which typically occur close to death or in situations of intense physical or emotional danger. The elements of the NDE include (a) cognitive features, including time distortion, thought acceleration, and a life review; (b) affective features of peace, joy, cosmic unity, and an encounter with light; (c) apparent extrasensory perception and an OBE; and (d) otherworldly encounters with mystical beings, visible spirits, and an uncrossable border. Although the content of the NDE may vary from person to person, the experience often permanently and dramatically alters attitudes, beliefs, and values in beneficial ways, reducing fears of death and heightening the experient's appreciation of life.

Greyson argues that NDEs cannot be explained away as culturally constructed, expectancy-driven, hallucinations; the product of medications given to dying patients; or the metabolic disturbances or brain malfunctions of a person close to death. Greyson favors a biosociological approach, based on information and systems theories, that focuses on the structure and process of the NDE rather than its content. At the same time, he does not dismiss the "survival of consciousness beyond death" hypothesis.

It would be difficult to find someone who has not at least heard about purportedly remarkable or unusual healing experiences and events. In chapter 11, Stanley Krippner and Jeanne Achterberg make an important distinction between anomalous healing events, defined by unusual and unexplained treatment outcomes, and anomalous healing experiences, the out-of-ordinary experiences associated with treatment. The chapter includes a taxonomy of various types of healing practitioners and describes their anomalous experiences and those of their patients. The authors warn of the potential clinical risks of endorsing any therapeutic practice exclusively because of a belief system or an unusual experience. They provide an account of the leading explanatory models for anomalous healing experiences and events, as well as guidelines on how to improve the systematic study of this area. They conclude that the various means that individ-

uals have used to enhance anomalous experiences and restore health deserve our careful attention.

We end the book with what may be the most influential of all anomalous experiences: the transcendental experience of unity known as mysticism. The claims of mystics about having an intuitive sense of the universe that belies everyday assumptions have contributed to the origin of most religions and, directly or indirectly, touched the lives of most humans. Following a similar path to William James' (1902/1958) seminal study of religious experience, in chapter 12 David Wulff considers these potentially life-changing events. He discusses the difficulty in providing a definition of mysticism and gives various examples and useful classifications of these experiences. He also describes the various methods, including meditation and psychedelic drugs, that have been associated with mysticism. Wulff elucidates the common aftereffects of mystical experiences, along with their therapeutic potentials and clinical risks, and concludes with an overview of the various explanations of mysticism, steering away from the twin dangers of false reductionism and uncritical overacceptance.

PURPOSE OF THIS BOOK

Previous books on anomalous experiences have typically been the work of one or two authors, who had the unenviable task of covering vast and disparate bodies of literature, or they have been anthologies in which the chapters did not follow the same structure and guidelines. We decided to do something different by inviting recognized international authorities on specific anomalous experiences to contribute chapters with a common outline. This approach gave us the opportunity to cover all the issues we thought were important, and it facilitates their comparison across chapters. We also asked contributors, regardless of their own theoretical stance, to evaluate in an even-handed manner the empirical support for their and alternative explanatory models.

Another important goal for us was to cover the basic research on these experiences, while addressing topics relevant to clinicians who have to evaluate the impact of these experiences in the lives of their clients. Some chapters, such as the one on psi-related experiences, have a wider coverage of clinical issues as compared with others, for instance synesthesia, for which the clinical implications of the topic are less central. Our aim is to satisfy the reader who wants a "state of the science" account of anomalous experiences, provide useful information to the clinician, and do justice to the experiences themselves.

Our list of anomalous experiences is not comprehensive; we sought to include experiences for which there is substantial research and that are generally considered more than transient curiosities by the experient (e.g.,

feelings of déjà vu). An arguably important omission is a chapter on dissociative experiences not already covered here (e.g., depersonalization). We did not include such a chapter because there are recent comprehensive anthologies (e.g., Lynn & Rhue, 1994; Michelson & Ray, 1996; Powers & Krippner, 1997) and descriptions of dissociative experiences (e.g., Cardena, 1997) that provide useful overviews and because dissociation is discussed throughout the book.

The chapters we summarized highlight a number of important reasons to study anomalous experience:

1. To paraphrase William James, psychology cannot claim to be comprehensive if it fails to account for varieties of experiences distinct from those considered normal. To fully understand the totality of human experience, we need to provide reasonable accounts of phenomena that, although unusual (e.g., strong synesthesia; see Marks, this volume, chap. 4) or apparently far-fetched (e.g., alien abduction experiences; see Appelle, Lynn, & Newman this volume, chap. 8), are an important part of the totality of human experience. Whereas Pope and Singer's (1978) complaint of a lack of study on the "stream of consciousness" has been partly addressed in recent years, a serious discussion of anomalous experiences within psychology has lagged behind.
2. As the quotation by Herbert Spencer at the beginning of the chapter implies, the current interest in evolutionary psychology should make us suspect that variety in experience, as in behavior, is to be expected. The strong normative impact of language and social conventions may deceive us into believing that we are more alike than we really are. Furthermore, to refer to James again, it is likely that at least some anomalous experiences have their "field of application and adaptation" (James, 1902/1958, p. 298). The boldest claim for a "field of application" is probably found in mysticism (see Wulff, this volume, chap. 12) in which "ordinary" experience is presumed to be severely limited. Anomalous healing experiences offer a less radical but promising example.
3. It is germane to the clinician to be able to distinguish between what is merely anomalous and what is pathological or abnormal (Stevenson, 1995). Whereas, at times, the unusual experiences of prophets and mystics have been uncritically regarded as "divine," or neurological conditions have been wrongly identified as spiritual enlightenment (see Sacks, 1995), the pendulum may have swung too far to the other side when mysticism is described as brain failure (e.g., Rose,

1976). As the many contributors to this book make clear, there is no evidence that anomalous experiences, per se, indicate psychopathology. In fact, the motivations behind similar behavior may differ among clinically distressed and nondistressed individuals (Cardena, in press). This consistent finding highlights the importance of understanding the difference between anomalous and abnormal behavior and experience. In the future, we expect that the clinician will consult this, or a similar volume, along with the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994) to help clarify the extent to which an experience does or does not imply pathology.

4. It is possible that some anomalous experiences may developmentally precede more usual experiences, as the greater prevalence of synesthetic phenomena in childhood suggests. Deikman (1966) and Hunt (1995) suggested that an understanding of mystical experiences helps clarify the development and nature of cognition in general. Thus, a full understanding of normal cognition may require a better understanding of and differentiation from anomalous experience.
5. Anomalous phenomena can elucidate the importance, and limits, of sociocultural variables on human experience. A good example is the study by Pasricha and Stevenson (1986), who found that near-death experiencers from India reported that they had to return to life because a "cosmic bureaucratic" mistake had been made. In contrast, experiencers in the United States typically report that they are "sent back" to fulfill their responsibilities or develop their potentials. The authors explained this difference in terms of the vast influence that bureaucracy has on Indian life, while pointing out that other aspects of the NDE are remarkably similar in those two countries.
6. Some anomalous experiences suggest that ordinary ones lack aspects that may enhance our appreciation of life (e.g., synesthesia, mysticism) or have other long-lasting beneficial effects (e.g., NDEs), as James remarked some decades ago. In Western and other cultures, people will continue searching for ways to affect their states of consciousness (e.g., Siegel, 1989), and increased psychological knowledge will add valuable information to assess the actual risks and benefits of various experiences. Also, if robust evidence accumulates that some anomalous healing experiences are associated with actual improvements in health, the nature of the healing pro-

cess may need to be reexamined (see Krippner & Achterberg, this volume, chap. 11).

7. In some cases, as in psi-related experiences, the results of controlled experiments have challenged widely held tenets about the relationship between consciousness and time-space constraints. Although this evidence is more persuasive to some researchers than to others, it seems clear to us that we need to research and know a great deal more before we can claim to have a full understanding of the relation between experience and the surrounding world (Broughton, 1991). And even if all unusual experiences are eventually found to refer to ordinary events, there are still several other compelling reasons to undertake the study of anomalous experience!

The time has come for psychologists and other social and behavioral scientists to seriously consider the varieties of anomalous experience and integrate them into theory, research, and clinical practice. Our book underscores many of the challenges facing the students of these experiences. They include the need to (a) approach and study unusual, and sometimes challenging, individuals and not just the usual convenience samples; (b) develop research methods appropriate to the area of concern, rather than assume that a "one method fits all" approach will work; (c) devise appropriate models of analysis and presentation of experiences that may be unfamiliar to the audience; and (d) seek to integrate findings into the larger corpus of psychology.

Any psychology that takes the challenge of William James to build a truly comprehensive discipline will have to carefully traverse the narrow path between the abysses of uncritical acceptance and outright dismissal of anomalous experiences. Only then may we be able to understand what compelled William Butler Yeats to write in *Vacillation*:

While on the shop and street I gazed
My body of a sudden blazed;
And twenty minutes more or less
It seemed, so great my happiness
That I was blessed and could bless.

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