

Journal
of
Near-Death Studies

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Dissociation: Normal or Abnormal? • *Marlene Spencer, M.Ed.*

Near-Death Prophecies of Disaster and the New Age: Are They True? • *Alfred S. Alschuler, Ph.D., D.H.L., H.D.P.*

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Volume 14, Number 3, Spring 1996



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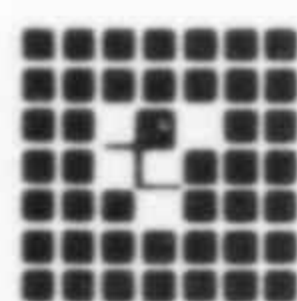
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JOURNAL OF NEAR-DEATH STUDIES (formerly ANABIOSIS) is sponsored by the International Association for Near-Death Studies (IANDS). The Journal publishes articles on near-death experiences and on the empirical effects and theoretical implications of such events, and on such related phenomena as out-of-body experiences, deathbed visions, the experiences of dying persons, comparable experiences occurring under other circumstances, and the implications of such phenomena for our understanding of human consciousness and its relation to the life and death processes. The Journal is committed to an unbiased exploration of these issues, and specifically welcomes a variety of theoretical perspectives and interpretations that are grounded in empirical observation or research.

The **INTERNATIONAL ASSOCIATION FOR NEAR-DEATH STUDIES (IANDS)** is a world-wide organization of scientists, scholars, near-death experiencers, and the general public, dedicated to the exploration of near-death experiences (NDEs) and their implications. Incorporated as a nonprofit educational and research organization in 1981, IANDS' objectives are to encourage and support research into NDEs and related phenomena; to disseminate knowledge concerning NDEs and their implications; to further the utilization of near-death research by health care and counseling professionals; to form local chapters of near-death experiencers and interested others; to sponsor symposia and conferences on NDEs and related phenomena; and to maintain a library and archives of near-death-related material. Friends of IANDS chapters are affiliated support groups in many cities for NDErs and their families and for health care and counseling professionals to network locally. Information about membership in IANDS can be obtained by writing to IANDS, P. O. Box 502, East Windsor Hill, CT 06028.

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Editor's Foreword

In our lead article in this issue of the Journal, educational psychology graduate student Marlene Spencer traces the origin of the concept of dissociation and its relevance to near-death experiences (NDEs). Noting that recent authors in this Journal and elsewhere have used differing definitions of dissociation, she attempts to clarify this controversial term and addresses whether the NDE may be a form of dissociative behavior and, if so, whether it is related to emotional pathology or to a normal protective response to stress.

Next psychologist Alfred Alschuler presents a novel empirical analysis of the accuracy of planetary visions of disasters reported by some NDErs. Alschuler assembles data from diverse sources and finds long-term trend reversals in 1987-88 in various measures of spirituality and caring, and in global catastrophes. The correlation of these trends, he argues, supports the New Age Effect, also predicted by some NDErs: that changes in humanity's caring for each other and for the planet can postpone the apocalypse.

This issue also includes an empirical study of NDEs among patients resuscitated in a hospital, by Italian psychologist and moral theologian Aureliano Pacciolla. While his survey corroborates many findings of American studies, Pacciolla also warns against limiting the scope of near-death research on the basis of previous work.

Canadian psychologist Keith Floyd presents an intriguing case of a woman whose NDE was apparently precipitated by electroconvulsive therapy. After relating this woman's elaborate experience, which included an accurate precognitive vision, he speculates on the mechanism by which this experience came about.

This issue includes two books reviews: Michael Sabom reviews fellow cardiologist Maurice Rawlings' controversial book, *To Hell and Back*; and psychiatrist Bruce Greyson reviews classical scholar Jenő Platthy's *Near-Death Experiences in Antiquity*. We end this issue with three letters to the editor: pediatrician Melvin Morse comments on the controversy over pioneering near-death researcher Kenneth Ring's "retirement"; parapsychologist Karlis Osiris raises the question

of bias in Greyson's study of life satisfaction among NDErs; and Greyson responds to Osis's comments.

Bruce Greyson, M.D.

Dissociation: Normal or Abnormal?

Marlene Spencer, M.Ed.
University of Alberta

ABSTRACT: Recent articles have addressed the question of whether or not the out-of-body experience reported by many people near death is a form of dissociative behavior. If so, is it related to other mental or emotional pathologies or is it a normal protective response to stress? This paper explores the history of dissociation and related terms, uncovering a multiplicity of uses and connotations. New orientations in physics and the rise of the New Science in the form of Chaos Theory allow a plethora of additional interpretations.

The out-of-body experience (OBE) is one of the most dramatic and memorable features of the near-death experience (NDE). That it has been reported by individuals not near death, during a variety of altered, traumatic, or volitional states, makes it special amongst other NDE phenomena. Glen Gabbard and Stuart Twemlow (1986) discussed the OBE as an altered mind/body state that is spatial rather than temporal, which is characteristic of dissociative states. This implies a qualitative difference between the OBE and dissociation. Yet the Winter 1993 issue of this Journal contained two articles that further confused the issue of the appropriate definition and use of the term *dissociation*.

Authors William Serdahely (1993) and Harvey Irwin (1993) presented different theoretical constructs to explain dissociation. Serdahely wrote:

Marlene Spencer is a Ph.D. candidate in Educational Psychology at the University of Alberta in Edmonton. Her dissertation explores the experiences of people who are near death. The author appreciates the contribution of W.H.O. Schmidt, Professor Emeritus, Department of Educational Psychology, University of Alberta, for bringing historical accuracy to some of the author's interpretations of the development of the discipline. Reprint requests should be addressed to mss@gpu.srv.ualberta.ca or Bruce Bain, Ph.D., at the Department of Educational Psychology, University of Alberta, Edmonton, Alberta, T6G 2G5, Canada.

I suggest that the OBE is one stage of a continuum of dissociation from the physical body The antithesis of dissociation then is *association*, being able to associate with a physical body, the end point of which is being totally centered in the body. (1993, pp. 93-94)

On the bottom of the facing page, Irwin offered:

Dissociation may be defined as a structured separation of such mental processes That is, feelings may be separated or "dissociated" from memories of specific incidents, and some memories may be kept separate or "repressed" from the flow of conscious thought. (1993, pp. 95-96)

Serdahely discussed a quantitative separation of the person or personality from the physical body. Irwin saw a separation of "mental processes" one from the other, not from the body. Even more non-specific, psychologists are often trained to use the term to refer to a lack of common experience between parts of a single individual. This still leaves one unsure of the dynamics, processes, or even the hermeneutics of such a situation.

This article is an attempt to trace the historical origin of the term *dissociation* and notions associated with it, to fill a gap in the understanding of the term, and to aid the reader in deciding if dissociation includes or excludes the OBE. Further, if the OBE is a form of dissociation, is it normal or abnormal? Is dissociation itself protective or pathological?

Historical Perspectives on Dissociation

An individual can control his or her perception of events by creating or escaping to other realities. One means by which one may access other realities is through dissociation. Early in the 19th century, young Mary Reynolds presented with two dissimilar personalities. This condition was epitomized by Robert Louis Stevenson in his *Dr. Jekyll and Mr. Hyde* (1886). Earlier, demonic possession had been thought to result in similar behavior. In hypnosis it was noted as well that often the personality seemed divided. As the person was in trance, a part of the person appeared to be aside, observing and protecting rather than participating. This was referred to as *double-consciousness* or *doubled-ego* in the writings of the 1890s (Hilgard, 1987). Bessel van der Kolk and Onnon van der Hart (1989), representative of the several journal contributors celebrating the centen-

nial of Pierre Janet's dissertation, defined Janet's notion of dissociation as "the crucial psychological process with which the organism reacts to overwhelming trauma and which results in the wide variety of symptoms then classified under the rubric of 'hysteria'" (p. 1532). Arnold Ludwig offered another definition:

Dissociation represents a process whereby certain mental functions which are ordinarily integrated with other functions presumably operate in a more compartmentalized or automatic way usually outside the sphere of conscious awareness or memory recall. (1983, p. 93)

The current edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, the DSM-IV (American Psychiatric Association, 1994) began its discussion of dissociative disorders as follows:

The essential feature of the Dissociative Disorders is a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment. The disturbance may be sudden or gradual, transient or chronic (p. 477)

Among the five categories of dissociation listed were Depersonalization Disorder and Dissociative Disorder Not Otherwise Specified. The DSM-IV recognized that these categories do not fit recognized syndromes. These are instances where a symptom is given a label because a coherent theoretical or obvious disease process is lacking or where the symptom is found in association with other phenomena. Frank Putnam (1989) included descriptions of dissociative disorders not included in previous editions of the DSM, such as hypnoid states, somnambulism (DSM-IV included this as Sleepwalking Disorder under the general category of Sleep Disorders), possession states, and out-of-body and near-death experiences. "In dissociation an aspect of the experience is kept out of conscious awareness" (Brown and Fromm, 1986, p. 11).

Janet (1859-1947) is credited with the first use of the term *dissociation*. This phenomenon was in need of a name, as several clinicians were encountering it in their practices. Janet described and named dissociation in his doctoral dissertation, *Automatisme Psychologique*, published in 1889 at the Salpêtrière in Paris. Jean-Marie Charcot, the "Napoleon of Neuroses" (Ellenberger, 1970, p. 95) and leader of the great French school and hospital of the latter 19th century, was mentor to the young Janet, and was his thesis supervisor (Janet, 1889). Charcot died unexpectedly just two weeks after Janet successfully defended his thesis in medicine.

In 1882, Mesmerism had taken clinical form under the name *hypnosis* as treatment for hysteria. Charcot, also dubbed "the Prince of Neurophysiologists," presented a paper to the skeptical French Academy of Science, who when approved its use in medicine (Kelly, 1991). It was with this act that the perennial mind/body problem moved from scholars in philosophy and theology and appeared in modern medicine.

During the hundred years between Franz Mesmer and Charcot, *animal magnetism* was replaced with *will, concentration, lucid sleep, somnambulism, psychotherapeutics*, and a plethora of other terms (Guillain, 1959). Medicine, despite the fact that its own sons were leaders in the fight to establish hypnotism as a valid medical practice, always refused to adopt medical psychology (Zilboorg, 1967).

The Salpêtrière was an asylum and prison housing 5,000 women that, under Charcot's leadership, became the world's leading medical center for clinical neurologic research (Guillain, 1959). By the 1880s Charcot had become interested in hypnosis as a therapy for hysteria, and published his *Lessons on Illnesses of the Nervous System* (1880-1883). He had many disciples and students and thousands of admiring patients. Evidently he had some detractors as well. That Charcot was an effective and influential teacher cannot be questioned. Sigmund Freud won a traveling scholarship to Paris in 1885 to study under Charcot. He was, prior to his Paris trip, ignorant of hypnosis. The impact of his Salpêtrière study evoked the thinking that was to influence the course of psychology's study of the mind for the entire 20th century (Hilgard, 1987).

When Janet formulated his notions of dissociation in 1889, it was the historical consequence of generations of clinical observation and the development of psychology as a discipline (Haule, 1986). For an idea whose time has come, history must provide an individual in whom the idea can germinate and receive expression. In this case, history provided a veritable beehive of individuals who worked in concert or at odds, stimulating, prodding, and leading one another in an atmosphere of scholarly excellence and professional competition, so that there grew much animosity regarding credit for the first ideas. The animosity created much development of theory, careful clinical observation, and effective documentation.

Hippolyte Bernheim joined the new School of Nancy as its leader in 1872 (Kelly, 1991). He had become interested in hypnotism after referring a patient, whom he had treated unsuccessfully for six years, to a country doctor, Auguste Ambroise Liébeault, who had received

much success and notoriety using the unorthodox treatment. The patient was immediately cured by Liébeault's method. Bernheim undertook the study of the treatment, publishing his classic *De la Suggestion dans l'état de veille* in 1884.

There was much competition between Bernheim of the Nancy School and Charcot of the Salpêtrière. Their differences centered on diverse theoretical orientations toward hypnosis (Kelly, 1991). Bernheim saw hypnosis as a psychological phenomenon; Charcot saw it as a physiological one. Bernheim saw hypnosis as a normal state; Charcot saw it as an abnormal state.

Janet, as Charcot's intellectual successor, viewed dissociation as a pathological state. His use of the term *dissociation* derived from the then popular theory of *association*. Associationist theory held that learning and memory were based upon an association of ideas. The notion of the association of ideas as representative of the structure of the mind was first articulated by John Locke (Hilgard, 1987). A few hundred years of elaboration made that model of cognitive function predominant. James Mill, John Stuart Mill, Alexander Bain, and William James were exponents of associationism. If the structure of the intellect consisted of associations of ideas, why could one not call the deterioration of the fabric of the mind into component parts *dissociation*?

It is important today to study Janet's hundred-year-old notion of dissociation and follow its development in order to understand the need to revise our present use of the term to cover new syndromes and treatments of which we are just becoming aware. Three Americans, associated as the Boston School (Hilgard, 1987), continued to observe, elaborate, and use the construct of dissociation.

James, philosopher and psychologist, Harvard University professor under whom the first American psychological laboratory was founded, chronicler of the thinking of his age, brought us up to date with scientific thought in turn-of-the-century Western Europe. His *Principles of Psychology* (1890) was a most readable treatise on who was thinking, researching, and teaching what. Information of this type was greatly needed in adolescent America. James educated the American intellect. His *Principles* was the basic text in psychology for generations. James acquainted American scholars and researchers with the techniques of hypnosis and the phenomena of dissociation.

By 1902, a student of James's, Boris Sidis, psychologist, director of the laboratory of the Psychopathic Hospital, Department of the New York Infirmary for Women and Children, had developed a clinical back-

log of case histories to support a very coherent theory of pathological dissociation. His model featured a progression of mental disintegration of systems by phases and stages, each represented by an illustrative clinical expression in his book *Psychopathological Researches in Mental Dissociation* (1902). That Sidis was a student of James was clearly illustrated by his introductory chapter on functionalism and the use of the method of introspection. His was a model of unified mind/body (psychic and neuronal) expressions of dissociation:

The whole pathological process with its stages and concomitant psychomotor manifestations, may thus be conveniently subdivided into three great classes, one passing into the other by imperceptible degrees: *functional psychosis*, *functional neuropathy*, and *necrotic neuropathy* . . . neuron degeneration, stages which for lack of a better name may be termed necrotic neuropathies. (1902, p. xii)

Of course, the cure for dissociations and disintegrations would be "reassociation, or synthesis of dissociated systems . . . from a therapeutic standpoint, *synthesis is cure*" (Sidis, 1902, p. xx). Cure was complicated by the fact that, according to Sidis, neuropathies are purely organic: "Unlike the functional psychoses, the neuropathies have no subconscious 'equivalents' No synthesis is possible" (1902, p. xiv).

Sidis has all but been forgotten; he is hardly more than a footnote in the history of psychology. Yet his notion of mental deterioration is unique in that it did not reflect the usual Cartesian polarizations. He viewed psychological and physiological dysfunctions on the same continuum. The main features separating the two were not the behavioral manifestations, but the degree of organicity, and thus the "curability."

Sidis coedited the *Journal of Abnormal Psychology*, founded in 1906, with Morton Prince (Ross, 1989), who became perhaps the best known authority on multiple personality disorder with his book *The Dissociation of a Personality* (1905/1978). Prince was a founder of the Psychological Clinic at Harvard and is credited with being an early proponent of psychotherapy and a user of hypnosis (Hilgard, 1987). Prince concluded that dissociation could not be purely physiological. Despite his illustrious career, "Multiple personality disorder, like hysteria, came to be regarded as an artifact of hypnotic suggestion" (Frischholz, 1985, p. 103).

The notion of dissociation as a pathological condition had persisted for almost a century. During that time, Freud eclipsed Janet in popularity. His ideas took firm hold on popular as well as psychological

thinking. Initially enthusiastic about the use of hypnosis, Freud soon abandoned it for his own method of *free association* of ideas as a way to access unconscious events (Higard, 1987; Kelly, 1991). He felt that it was advisable for the person to be fully aware of issues as they arose, as "the Ego strives to maintain contact with reality to preserve its organization" (Kelly, 1991, p. 85). Freud's popularity resulted in the virtual abandonment of hypnosis as a credible therapy until mid-century. The return from war of millions of young men suffering from the psychogenic trauma of their experiences, referred to as *shell shock* during World War I, provided the impetus to reexamine notions of dissociation. In the interim, the definition of dissociation had changed many times.

Well before Janet, the Scottish physician James Braid (1795-1860) defined hypnotism. Characteristic was amnesia, and the *double-conscious* state. Ernest Rossi and David Cheek (1988) indicated that this was early recognition of "state dependent" learning and memory, wherein material that is learned does not generalize to other states of consciousness. Implied also was the notion of *split personality*, or a splitting of conscious and unconscious processes. That splitting of parts of awareness was what Janet had in mind when he coined the term *dissociation*. Initially, one had difficulty detecting a difference in usage of the terms *dissociation* and *hypnosis*.

As schizophrenia became recognized as a clinical entity separate from hysteria, the phenomenon of splitting or dissociation became associated with that label. The term *schizophrenia* was introduced by Eugen Bleuler (Rosenbaum, 1980). In fact, *split personality* and *schizophrenia* are still synonyms in lay vocabularies. We now view dissociation as another dimension of the trance state (Brown and Fromm, 1986). But paradoxically we find a category of pathology listed in the DSM-IV as Dissociative Disorders with no reference to hypnotherapy nor to dissociation in trance. We do, today, have the dual use of the term: one abnormal, one normal.

Contemporary Diagnostic Approaches to Dissociation

Is dissociation necessarily a pathological state, as Janet is said to have espoused, or could it be a normal, in fact, healthy, phylogenetically developed response to intolerable physical or emotional trauma (Ludwig, 1983)? Dissociation appears to be commonly encountered in

populations who have undergone the stress of trauma, but otherwise exhibit no abnormal characteristics. Increase in awareness of child abuse and recognition of Multiple Personality Disorder as a clinical entity focus our attention upon a model that could accommodate the thinking of both antecedent French schools. Putnam wrote:

Many authors conceptualize these different forms of dissociation as lying on a continuum from the minor dissociations of everyday life, such as daydreaming, to the major pathological forms, such as multiple personality. (1989, p. 6)

Since dissociation can be used as a tool in therapy and as an effective defense during trauma, there was a need to acknowledge a nonpathological form. This model of a continuum from spontaneous trance states to gross pathology is useful.

Dissociation becomes dysfunctional when it interferes with normal life, as with those people who experience amnesia or become self-destructive, suicidal, manipulative, or aggressive. (Anderson, 1988, p. 26).

Does the fact that only 200 cases of Dissociative Disorder were reported in the world's literature prior to 1930 (Greaves, 1980) indicate a healthy population, ignorant mental health providers, or a rerouting of cases under other labels? We have a large semantic tangle.

In 1977, Ernest Hilgard put forward his *neodissociation theory of divided consciousness* (Ross, Joshi, and Currie, 1990), in which he postulated both horizontal and vertical "splits" of consciousness. The horizontal split dissociated psychic contents from the conscious. The vertical split is not dissociation, but *repression*. Thus another source of confusion, the distinction between dissociation and repression, was schematized.

The following is a valuable current description of the dissociated state:

Perhaps most personalities segment for purpose of adaptation and defense The healthy "normal" person functions like a confederation of self-parts. Usually these are covert and are observable more as mood changes. We call these "ego states." Hilgard's "hidden observer" phenomena are probably covert ego states that are sufficiently dissociated, so that pain can be repressed into them (see Hilgard, 1977). This leaves the executive state relatively pain free Cathartic release may require many abreactions since the major personality could not handle the feelings in the first place and can now accept, release, and integrate them only piecemeal. Cognitive restructuring (genuine insight) must accompany or follow release of

affect. When the emotions resubmitted to the primary states are more than it can handle, it may temporarily withdraw or regress Underlying personalities and ego states, being "partpersons," do not have the ability to generalize and engage in abstract thinking. They frequently think concretely and illogically like a child. It is common for an underlying personality to plot the destruction of death of the person while believing that it, itself, will survive. (Watkins and Johnson, 1982, pp. 138-143).

Hilgard presented a gallant effort to corral diverse theoretical views under one schema. His model utilized Janet's causal explanation of dissociation, and by postulating horizontal and lateral splits to accommodate both repression and amnesia, he included Freud. More importantly, he left the gate open for more recent interests in dissociative states characteristic of "normal" populations. These include nonpathological, that is, "healthy" and "protective" dissociations.

Currently an important area of public interest is the increasing incidence of "adjustment" disturbances listed in DSM-IV under the heading of Anxiety Disorders as Posttraumatic Stress Disorder (American Psychiatric Association, 1994, pp. 424-429). Posttraumatic Stress Disorder has received attention as it appears to be a "pre-split" condition. As described earlier by Janet, it is a reaction to overwhelming trauma. Contrary to Janet's thinking, many now believe that the dissociation produced by trauma is not only not pathological, but natural (Ludwig, 1983), common (Ross, Joshi, and Currie, 1990), healthy (Watkins and Watkins, 1990), and protective (Spiegel and Cardena, 1990).

For years it has been proposed that a dissociative response to trauma is not limited to our species (Jaynes, 1976). If true, that would indicate a mechanism that would have begun to develop before differentiation of our phylogenetic order. To illustrate this point, Ludwig (1983) discussed the dissociations that other mammals evidence when faced with mortal danger, such as "playing dead." When killed by predators, most prey do not release "fright" hormones that would render the flesh inedible. The implication that other species may also have out-of-body near-death experiences challenges our ideas regarding the "humanness" of consciousness.

Irwin, citing Putnam, pointed out that the capacity for dissociation develops "in childhood as a normal process intrinsically associated with fantasy and imaginative ability" (1993, p. 96). It is the child's developmental nature to construct reality from environmental clues,

and out of necessity, bridge gaps in logic with creative imagination. For the young, as for the critically ill, the line between common and idiosyncratic realities is not clearly drawn. There seems to be a place neither here nor there, where boundaries ebb and flow in time and space. Inhabiting that space is creative imagination, that same quality so vital to successful relaxation and imagery. In the adult, it is the basis of hypnotizability (Hilgard and Hilgard, 1955) and the ability to dissociate in theory. Perhaps the near-death out-of-body experience is an adaptive utilization of a neotenus behavior.

Although dissociation had been called a "state" of consciousness for a hundred years, it had never really been afforded that label in our thinking. It has been thought of as a characteristic—if given too much, it is unhealthy: something one can do too readily; a trait or correlate of a trait. The existential facts are that we each can and do view our body as the subject of attention or as the object of it (Bain, 1973). In the out-of-body experience, the body is the object of regard. We are looking at ourselves objectively! And never have we thought of the pathological consequences of too little dissociation, or of none at all.

Implications of Contemporary Physics

Under the heading of "normal dissociations" is a growing interest in what I call *recreational* or *volitional dissociation*. Most of the literature generated in the 1960s by interest in hallucinogenic and other psychotropic chemicals, with altered state research (Tart, 1969) generated by psychotherapeutic techniques, religious cults, brainwashing, psychogenic healing, etc., is currently being resurrected and reexamined under the light of the new thinking generated by the rise of holistic ideology and Chaos Theory (Bohm, 1980; Gleick, 1987; Ruelle, 1991).

Chaos Theory, if it is the mark of a new great paradigm shift, requires a reformulation of all of the models of dissociation referred to in this paper. If chaos is anything it is *not* linear (Combs and Holland, 1990).

We have been stubbing our noses on the window of the mind since Newtonian mechanics and Cartesian dichotomies molded the Scientific Age. Isaac Newton and René Descartes were the fathers of the linear model from which our thinking springs. Almost all models are linear, as our visual images of explanation are largely limited to the

two-dimensional page or paper. We have been, for hundreds of years, prisoners of two-dimensional thought. Linear models by nature go from one quality or quantity to another. Hilgard's neodissociation theory is linear, going from the healthy "normal" everyday dissociations to the pathology of the fully split multiple personality. Serdahely's OBE as a "stage of a continuum of dissociation from a physical body" (1993, p. 93) and, as reported by Irwin (1993), his proposal that the NDE and Multiple Personality Disorder are similar phenomena are also linear.

We were aware of the third dimension, as our tactile, everyday existence demonstrated that two dimensions failed to explain the evidence of our other senses, or the experiences of the world. Now we are at the point of realizing that the notion of a three-dimensional universe fails to give us insight into the realm of phenomena such as thinking itself, the world of the mind, and the world of particles of matter too small to observe directly. In other words, we finally understand that the cosmos is composed of that which is beyond our abilities to observe physically and directly. Truth can no longer be determined by our sensory perception of the world alone. In short, there may be a reality we can never know.

Chaos Theory would dictate we accept the notion that all states of consciousness, all alternates, part-persons, and ego states, could exist simultaneously as well as sequentially. In a lively and engaging fashion, Allan Combs and Mark Holland (1990) reviewed the shift brought about in the early 20th century in physics by the mounting number of questions the old mechanistic world of Newton failed to explain. Albert Einstein's general theory of relativity liberated thinking and Werner Heisenberg's quantum theory began to restructure it. The "new physics" leans strongly on the notion of wholeness:

The cosmos is of-a-piece, not empty, but filled with itself, much as a painting is filled with itself. There are foreground and background regions, but the canvas is continuous . . . the universe as a continuous, unbroken fabric. (Combs and Holland, 1990, p. xxiii)

Motion and action are also, as is everything, dynamic, continuous, and unbroken; it is the *holomovement*. We begin to understand what physicists were talking about with the advent of the hologram—but just. We are now familiar with the notion that every part contains the whole; that is, each contains all the information of the whole. David Bohm, the physicist who has done the most retrofitting of his theories of chaos and the "new physics" to psychology to produce a

unified theory of mind and matter, used the term *active information* in its literal sense, "to put in form," to describe the manner in which form and shape are given to movement (Bohm, 1990).

We are unaware of the vast spectrum of possible realities by, as Bruce Greyson (1985) pointed out, the nature of our corporeal limitation and our science. There may be parallel realities in cosmic chaos, but we cannot, while alive, range the universe. Perhaps those who are dying, that is, between the states of living and not living, catch a glimpse of chaos, of parallel realities that might abound in the vicinity of life. We cannot know if life continues after death until we make the direct observation. The sweet attraction of death caused by an NDE does change one's attitude toward it. Greyson (1989) remarked that the aftereffects, the altered attitudes, traits, and lifestyles caused by the NDE show it as a phenomenon distinct from other altered states and from other forms of dissociation. Finally, the legacy of such an experience is the insatiable need to know—everything!

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Near-Death Prophecies of Disaster and the New Age: Are They True?

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ABSTRACT: Planetary visions of many near-death-experiences predicted a rise in disasters culminating in economic breakdown and the possibility of nuclear war in 1987-88, though the apocalypse could be postponed if human beings increased their love for God, each other, and the earth (the New Age Effect). I examined long-range data and found trend reversals in 1987-88: increases in religiosity, service, and United Nations peacekeeping efforts, and decreases in chlorofluorocarbon production, nuclear warhead stockpiles, arms exports, and interest in economic well-being. Long-range trend data also show rises in the number of weather disasters, fires, and accidents peaking in 1987-88 and then declining. The correlation of these diverse, predicted trends supports the hypothesized New Age Effect. Further research is suggested for testing the New Age Effect.

At the borderland between life and death, when consciousness seems to escape the body, it may also seem to transcend earthly laws and enter another world. Most people who have near-death experiences (NDEs) believe this; those who experience a planetary vision (PV) during their NDE are convinced they received knowledge of our global future (Audette, 1981; Grey, 1985; Ring, 1982, 1984, 1988). PVs often portrayed an apocalypse beginning in the early 1980s with an increasing number of earthquakes, volcanos, land mass changes, a pole shift, extreme weather conditions, and food shortages culminating around 1988 with famine, social disorder, economic collapse,

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and the possibility of a nuclear war. These horrendous events were viewed as a necessary educational transition to the New Age.

Although the ultimate outcome is inevitable, according to these PVs, the timing and events of the transition are not. One NDEr reported that:

During my experience I . . . was made to understand that nothing is absolutely fixed and that everything depends on how we choose to use our own free will, that even those events that are already predestined can be changed or modified by a change in our own way of relating to them. (Grey, 1985, p. 123)

Another NDEr said, "Unless people learn to get along and care about each other and care about other life on this planet, there will be no planet" (Ring, 1984, p. 206).

This is more than a warning against war and wasting our natural resources. PVs teach that there is a causal link between a collective loving consciousness and disasters that works both ways. First, disasters are a natural consequence of violating universal laws:

I was informed that mankind was breaking the laws of the universe, and as a result of this would suffer. . . . Mankind, I was told, was being consumed by the cancers of arrogance, materialism, racism, chauvinism and separatist thinking. (Ring, 1984, p. 198)

Second, obeying the universal laws by changing our collective attitudes and actions will reduce disasters and postpone the apocalypse:

It [was] given to me that in 1988, the world will be destroyed by earthquakes and volcanic eruptions, but if people will turn to God and honor Him, some of these things will be put off. (Ring, 1984, p. 206)

Another NDEr reported that 1988 would "be the year everything would be wiped away if we didn't change" (Ring, 1984, p. 205).

I will refer to this hypothesized causal connection as the New Age Effect, since either disasters will educate us to be more loving, or being more loving will reduce disasters. Both are routes to the New Age of peace, universal love, and wise stewardship of the earth.

By 1988 the earth had not changed its axis, California and Florida were still part of the mainland, nuclear war had not happened, and worldwide economic collapse and social chaos had not occurred. Is there any evidence that human beings used their free will around 1987-88 to turn toward God and care more for each other and the

planet? Is there any support for the New Age Effect? To answer these questions, I examined published long-range trend data for significant changes in planetary conditions around 1987-88.

Method

Long-term trend data on United States religiosity were taken from the Gallup Organization. They have asked a variety of questions to a stratified random sample of United States citizens since the 1950s (Gallup Poll News Service, 1994). Not every question, however, was asked every year; thus, trends are not available on the full array of questions they asked.

Trend data on caring for others were obtained from the University of California, Los Angeles's Cooperative Institutional Research Program (CIRP), which has conducted yearly national surveys of college freshmen for 25 years (Astin, Korn, and Riggs, 1993; Dey, Astin, Korn, and Riggs, 1992). While the attitudes of college students are not direct indicators of current national attitudes, they are plausible predictors of future adult values.

The Worldwatch Institute provides yearly data on nine aspects of the planet's health (Brown, 1994; Brown, *et al.*, 1994). Their data are obtained from a variety of sources.

The United States Office of Foreign Disaster Assistance (OFDA) has been the definitive source of data on worldwide disasters since 1964, their inaugural year. OFDA defines disasters as follows (personal communication, 1994):

Earthquakes and volcanos are included if the number of people killed is at least six, or the total number killed and injured is 25 or more, or at least 1,000 people are affected, or damage is one million dollars or more . . .

Weather disasters (floods, storms, typhoons, landslides, heat and cold waves, etc.) are included if the number of people killed and injured totals at least 50, or 1,000 or more are homeless or affected, or damage is at least one million dollars . . .

Accidents (fires, plane crashes, train wrecks, the Chernobyl nuclear accident, the Bhopal chemical leak, etc.) are included if the number killed or injured is at least 100, or damage is estimated at one million dollars or more.

Several limitations in OFDA data should be considered when interpreting these trends. First, the numbers killed and affected are approximate. Therefore I included in this study only the number of disasters and not yearly sums of killed and affected individuals.

Second, over time several extraneous factors have increased the number of disasters included in the OFDA census. The dollar amount of damage is a function of inflation. Since the cost of disasters has increased, more disasters qualify now than did 30 years ago. There is greater population density in some marginal and high risk areas. Improved record keeping also may account for some increases. These factors not only contribute to increases over time, but also tend to make decreases less steep.

Third, the numbers of reported droughts and food shortages do not come from reliable sources. They reflect political and financial interests of countries requesting American aid, rather than the actual numbers affected, and may be massively over- or underestimated. For example, Emperor Haile Selassie denied the existence of a famine in Ethiopia, but his successor, Mengistu Haile Mariam, overestimated the numbers so that donated foodstuffs could feed his army and be converted into cash to support his war against Eritrea, Tigray, and the Wollo. Food shortages and related phenomena such as civil strife, population displacement, refugee flows, and droughts are interrelated, multiyear, and multicountry events. OFDA has not been consistent in reporting these either as one event or as multiple events, nor in the number of years the events are reported.

A fourth limitation is that OFDA has data only on countries outside the United States. The Federal Emergency Management Agency (FEMA) keeps data on American emergencies and disasters. FEMA deliberately does not define emergencies or disasters. Assistance is determined in each case based on severity, availability of federal funds, and political factors. FEMA does not report the number of disaster and emergency requests it has turned down, nor will FEMA officials comment on whether the definitions of disasters have changed over time (United States Federal Emergency Management Agency, personal communication, 1994). For these reasons the FEMA data are too confounded to provide meaningful trends. Thus, I included in this study disaster data from all countries except the United States.

To see the disaster trends more clearly, I have combined yearly data into graphs that show rolling three year totals: that is, the total for 1964-66, then the total for 1966-67, and so on.

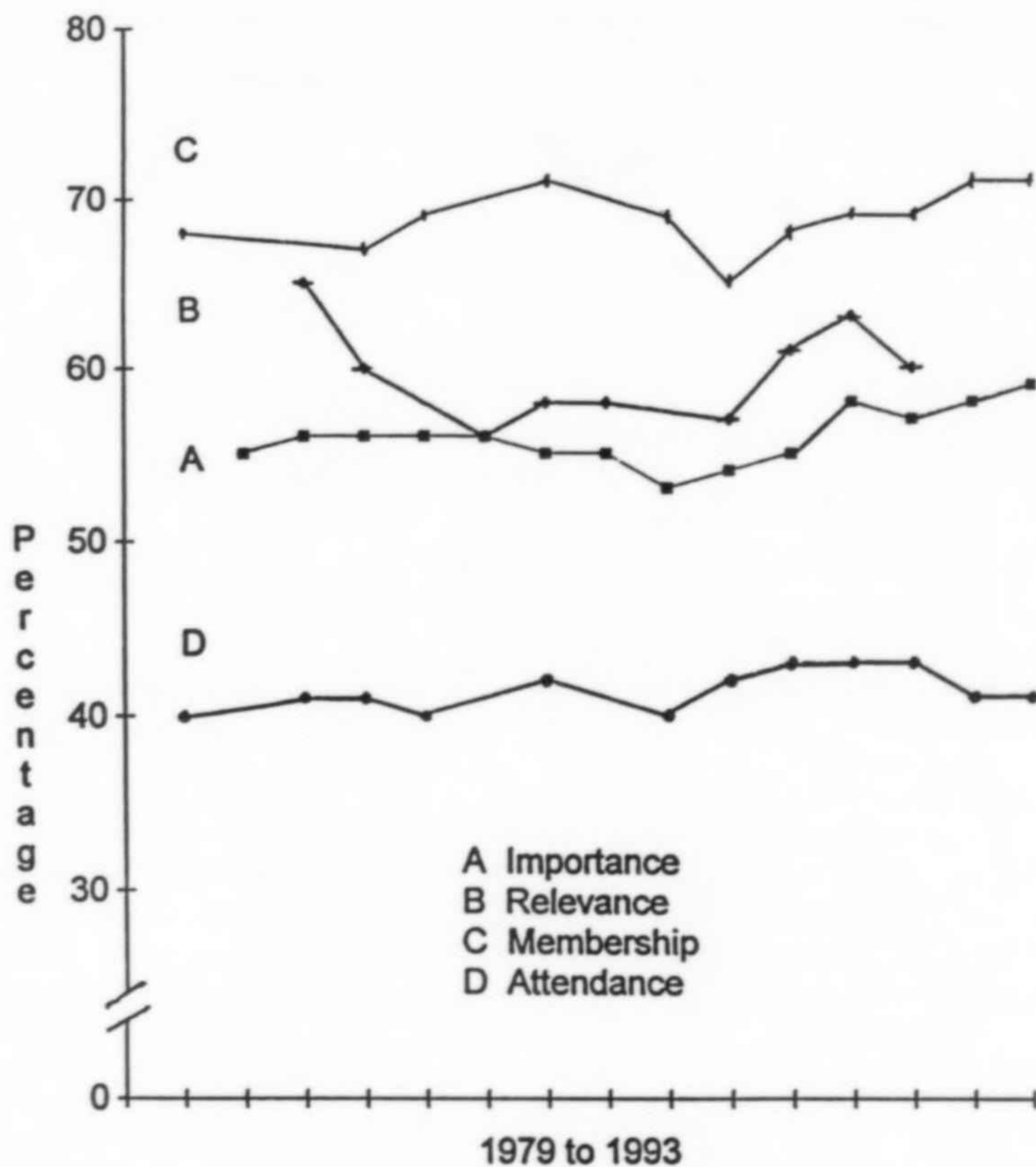


Figure 1. Trends in U. S. religiosity. From Gallup Poll News Service. (1994). *Religious Trends*. Princeton, NJ: Gallup Organization, pp. 1-5. Copyright 1994 by the Gallup Poll Organization. Adapted with permission.

Results

Did People Turn Toward God Around 1987-88?

Four of the Gallup Organization's questions about American religiosity were sufficiently germane and frequently asked to report in Figure 1. This graph shows the percentage of respondents who agreed with the following statements: A = "Religion is very important in my life"; B = "Religion can answer all or more of today's problems"; C = "I am a member of a church or synagogues"; and D = "I went to church or synagogue within the last seven days."

With the exception of church or synagogue attendance, which remained stable within a 3 percent range for 15 years, the other three

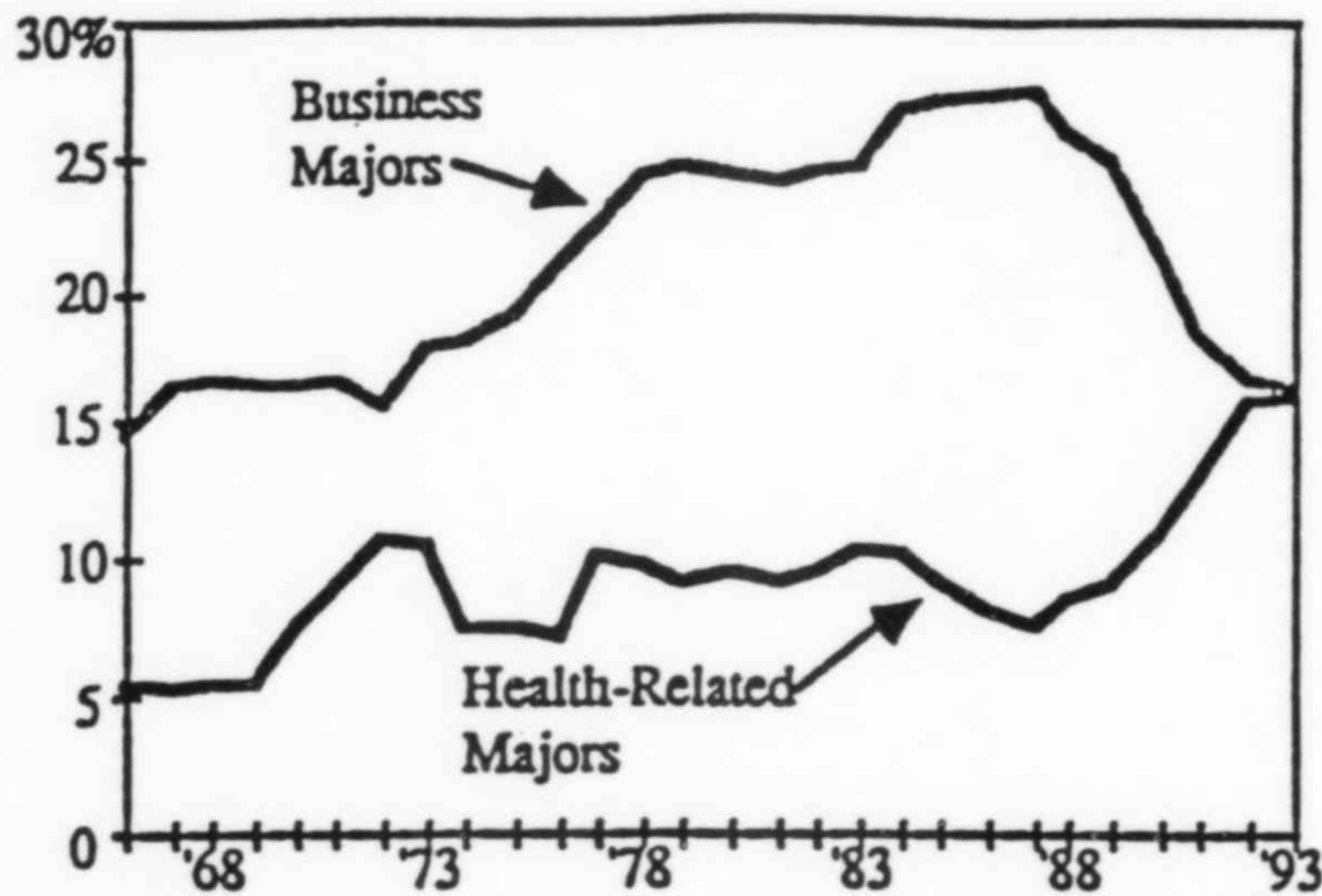


Figure 2. Changing freshman interest in business and health-related majors. From Cooperative Institutional Research Program. (1994). *The American Freshman: National Norms For Fall 1993*. Los Angeles, CA: UCLA Higher Education Research Institute, p. 2. Copyright by the CIRP of the Higher Education Research institute, UCLA Graduate School of Education. Used with permission of CIRP.

indices of religiosity hit a low in 1987 or 1988 and began to rise, as predicted. Given the stratified random sample of the American population, an increase of 6 percent represents up to 16 million American citizens.

Did People Begin Caring More for Each Other in 1987-88?

CIRP surveys show trends in freshmen "caring" and can be seen as predictions of future mature adult trends (Astin, Korn, and Riggs, 1993; Dey, Astin, Korn, and Riggs, 1992). Again, as seen in Figures 2, 3, and 4, 1987 was a turning point. Figure 2 shows that college students majoring in business began to decline, while health-related majors began to rise. Figure 3 shows a shift in freshmen's life goals: numbers of those seeking to "be well off financially" began to decline, while those seeking to "develop a meaningful philosophy of life" began to rise. Figure 4 shows that freshmen's "commitment to promoting racial understanding as a life goal" began to rise after 1987.

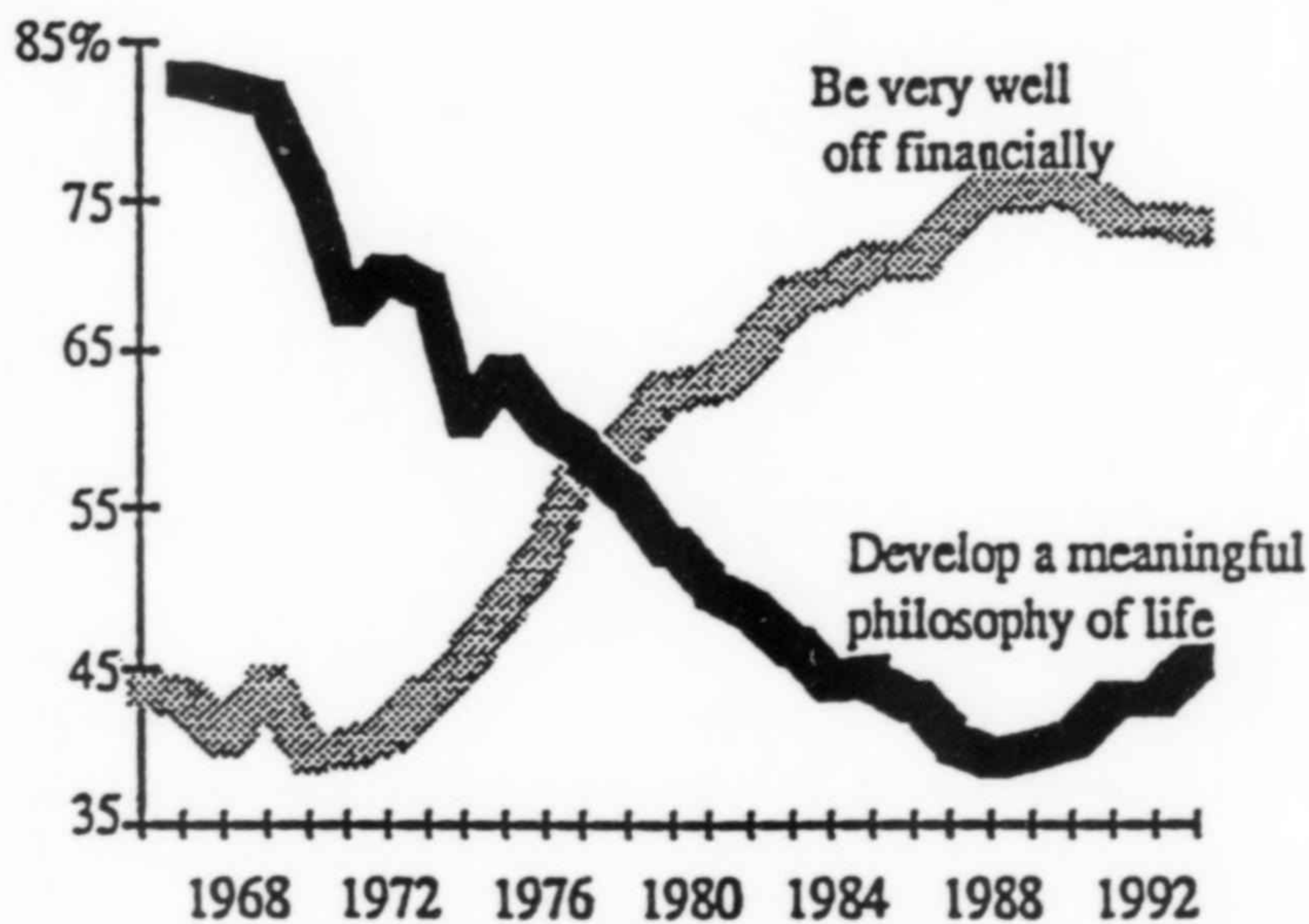


Figure 3. Freshman life goals. From Cooperative Institutional Research Program. (1993). *The American Freshman: National Norms For Fall 1992*. Los Angeles, CA: UCLA Higher Education Research Institute, p. 2. Copyright by the CIRP of the Higher Education Research Institute, UNCL Graduate School of Education. Used with permission of CIRP.

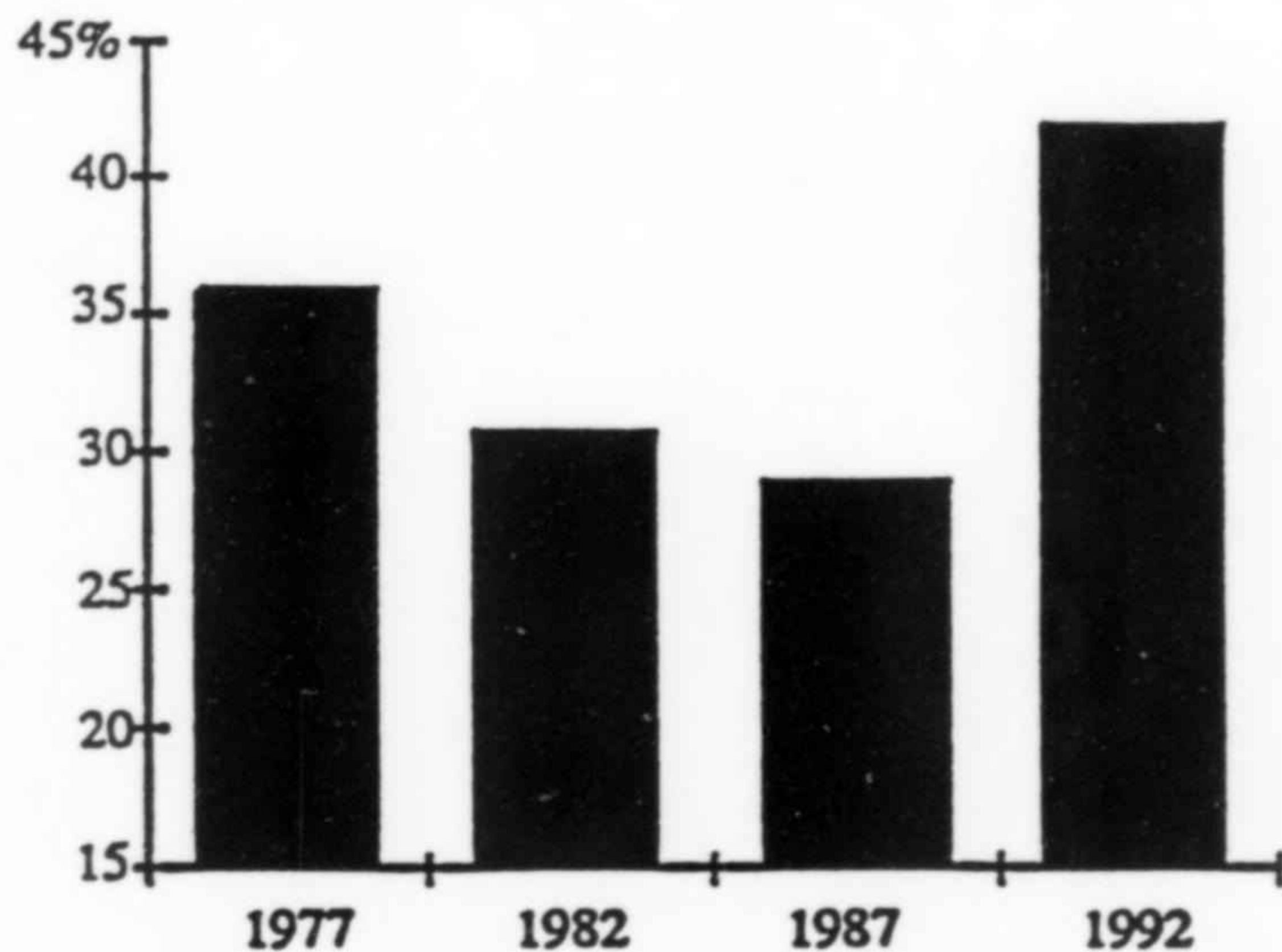


Figure 4. Commitment to promoting racial understanding as a life goal. From Cooperative Institutional Research Program. (1993). *The American Freshman: National Norms For Fall 1992*. Los Angeles, CA: UCLA Higher Education Research Institute, UCLA Graduate School of Education. Used with permission of CIRP.

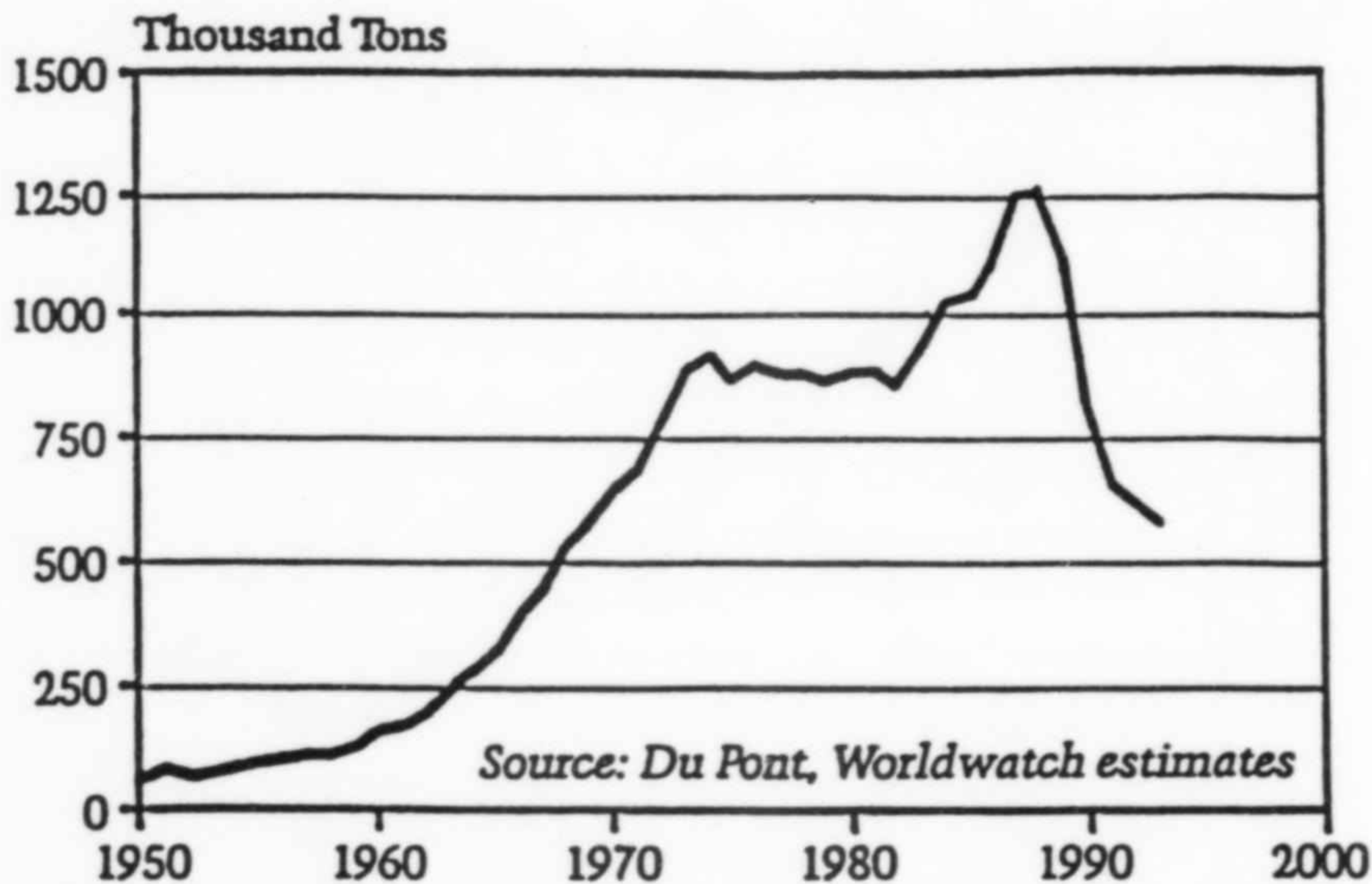


Figure 5. World production of chlorofluorocarbons, 1950-93. From Brown, L. R. (1994). *Vital Signs: The Trends That Are Shaping Our Future*. New York, NY: Norton, p. 65. Copyright 1994 by the Worldwatch Institute. Reprinted with permission.

Did People Begin to Take Better Care of the Planet Around 1987-88?

Data on the care of the earth are published each year by the Worldwatch Institute (Brown, 1994). Two of the most closely watched signs are the world production of chlorofluorocarbons (CFCs), and the number of nuclear warheads, since both pose apocalyptic threats to the world. Four related trends are presented in graphs 5, 6, 7, and 8.

As seen in Figure 5, world CFC production peaked in 1987 and then dropped rapidly, beginning in 1988. Figure 6 shows that the number of worldwide nuclear warheads peaked in 1986 at 69,480, and began dropping in 1987. By 1994 the total had decreased by 28 percent. Figure 7 shows that the export of conventional weapons peaked in 1984 and again in 1987, while a drop of 63 percent began in 1988. As seen in Figure 8, there was a rapid rise in the number of United National peacekeeping missions starting in 1988. These reflect significant formal international agreements and unprecedented collective action for peace beginning in the predicted years.

These clear breaks in long-range trends are in marked contrast to all but three of the remaining 35 vital signs—indicators such as

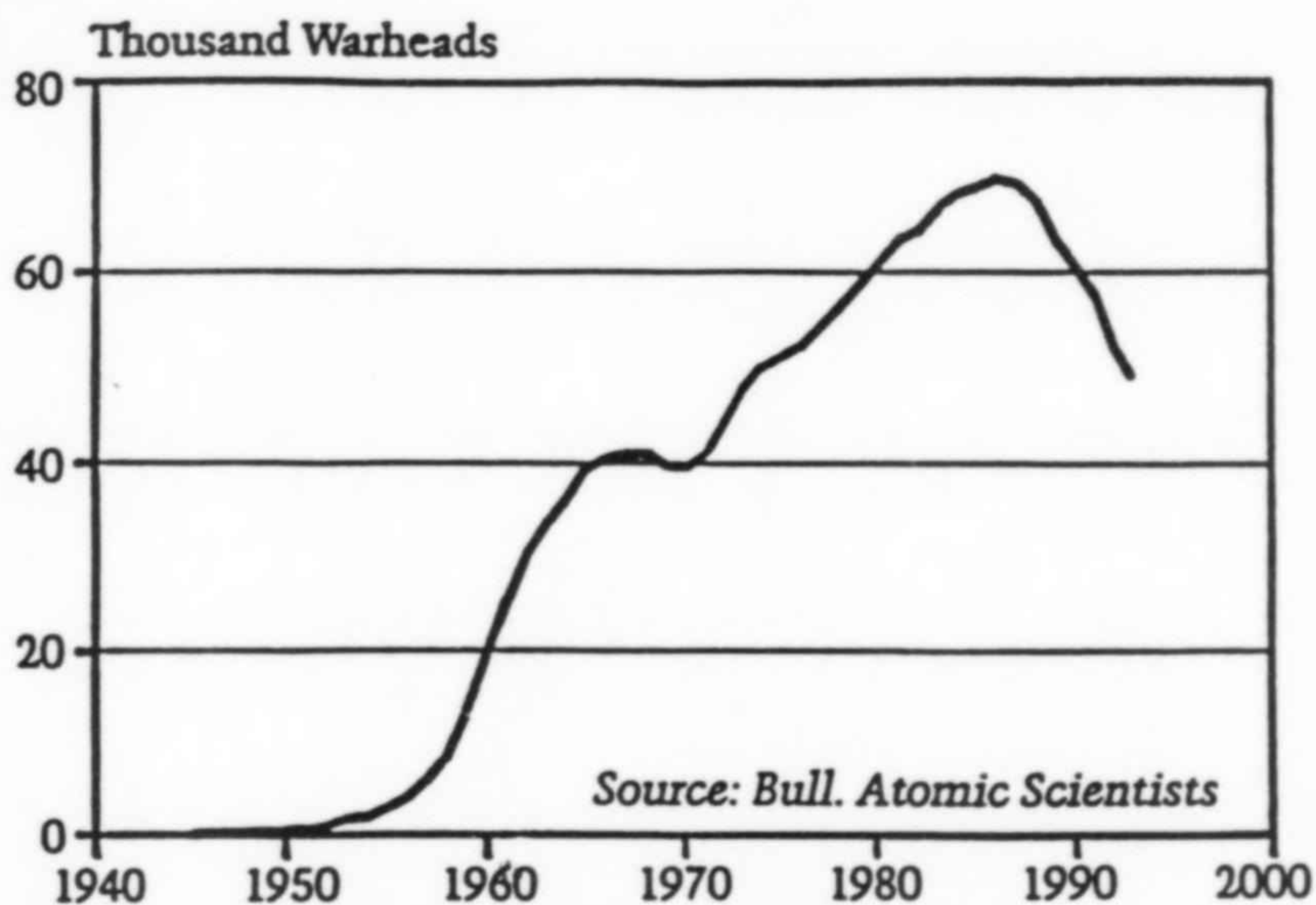


Figure 6. Global nuclear arsenal, 1945-93. From Norris, R. S., and Arkin, W. M. (1993, December). Estimated nuclear stockpiles 1945-93. *Bulletin of the Atomic Scientists*. Copyright 1993 by the Bulletin of the Atomic Scientists. Reprinted with permission.



Figure 7. Exports of conventional weapons. From Brown, L. R. (1994). *Vital Signs: The Trends That Are Shaping Our Future*. New York, NY: Norton, p. 111. Copyright 1994 by the Worldwatch Institute. Reprinted with permission.

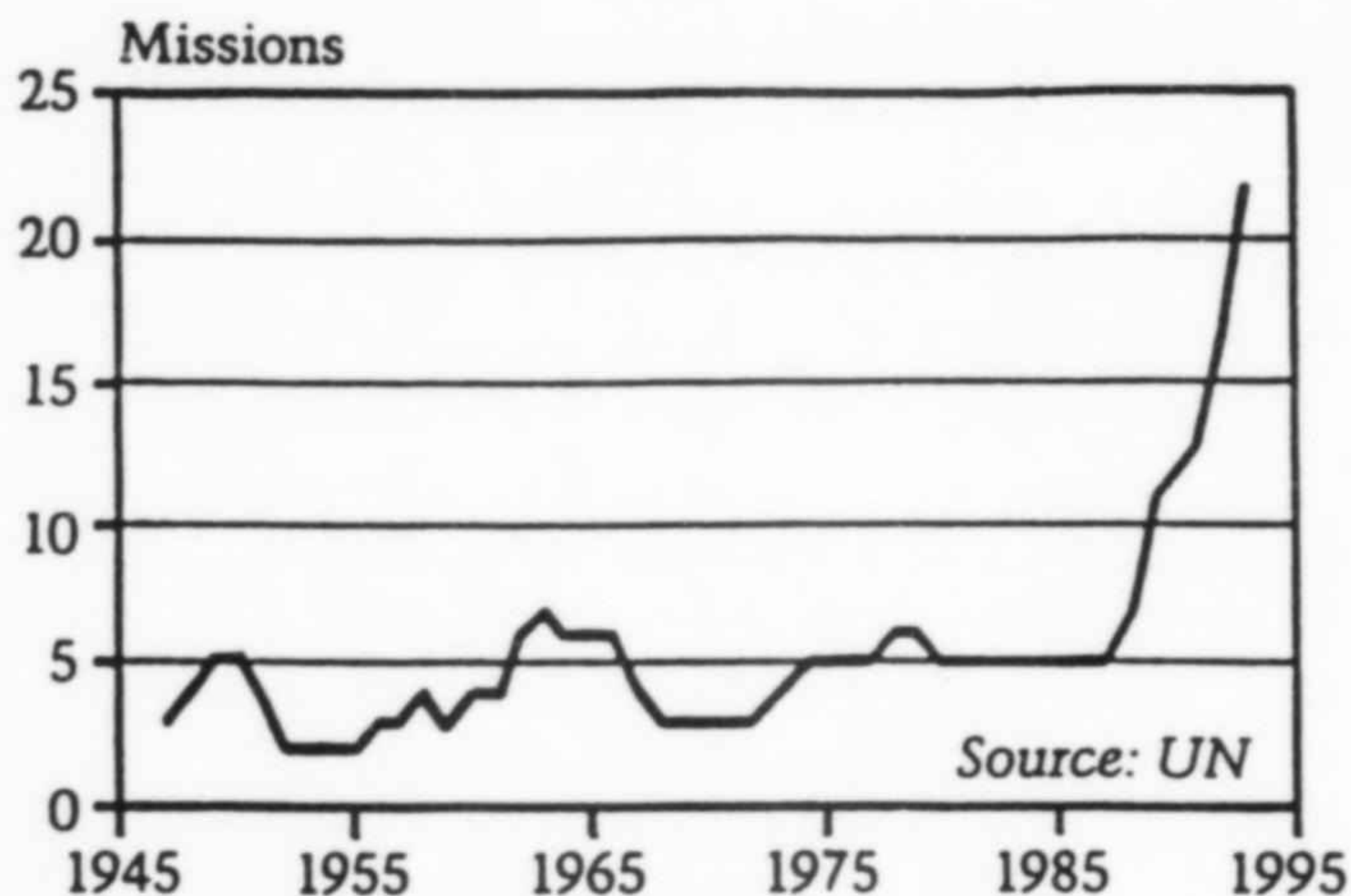


Figure 8. Number of peacekeeping missions per year, 1947-93. From Brown, L. R. (1994). *Vital Signs: The Trends That Are Shaping Our Future*. New York, NY: Norton, p. 113. Copyright 1994 by the Worldwatch Institute. Reprinted with permission.

world production of grain, corn, soybeans, meat, and fish catch; irrigation; production of oil and wind energy; global average temperature; atmospheric concentrations of carbon dioxide; gross world product; external debt of developing countries; world production of paper, roundwood, gold, bicycles, cars, pesticides, and cigarettes; population growth; and cases of HIV/AIDS. All of these vital signs continued their 30- and 40-year trends within an expected range of up and down fluctuations. The three remaining vital signs that showed a break in 40-year trends were world carryover grain stocks, which peaked in 1987; world fertilizer use, which peaked in 1989; and coal use, which peaked in 1988-89.

Thus several significant changes occurred in 1987-88 indicating a turn toward God, increased altruism (in the United States), and vigorous new efforts to wage peace and to stop the depletion of the ozone layer. The confluence of these trends shows predicted changes at the predicted critical years. NDErs also predicted that these changes would reduce disasters.

Is There Evidence for the New Age Effect?

The trend data on international disasters are presented in the next four graphs. Figure 9 shows a steep rise in the worldwide number

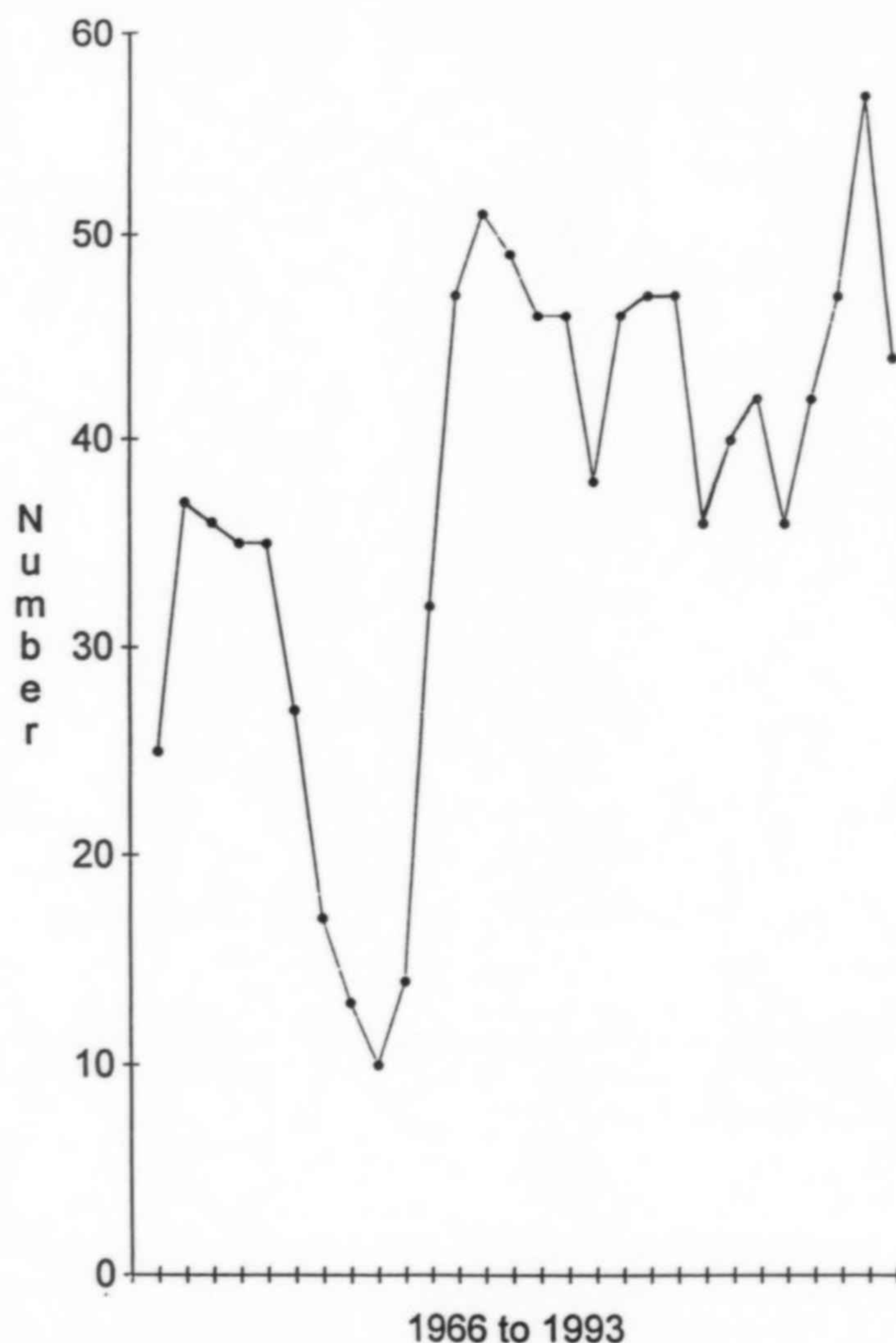


Figure 9. Worldwide trends in earthquakes and volcanos, 1966-93 (rolling three-year totals). Source: U.S. Office of Foreign Disaster Assistance.

of earthquakes and volcanos beginning in 1975. A peak occurred in 1978, 10 years before the predicted critical year, and then drifted lower for 11 years before another rise began in 1990. From a larger perspective, it appears that there has been a steady rise in the number of earthquakes and volcanos, within a fairly constant range in yearly variations. Thus the data on earthquakes and volcanos do not support the New Age Effect.

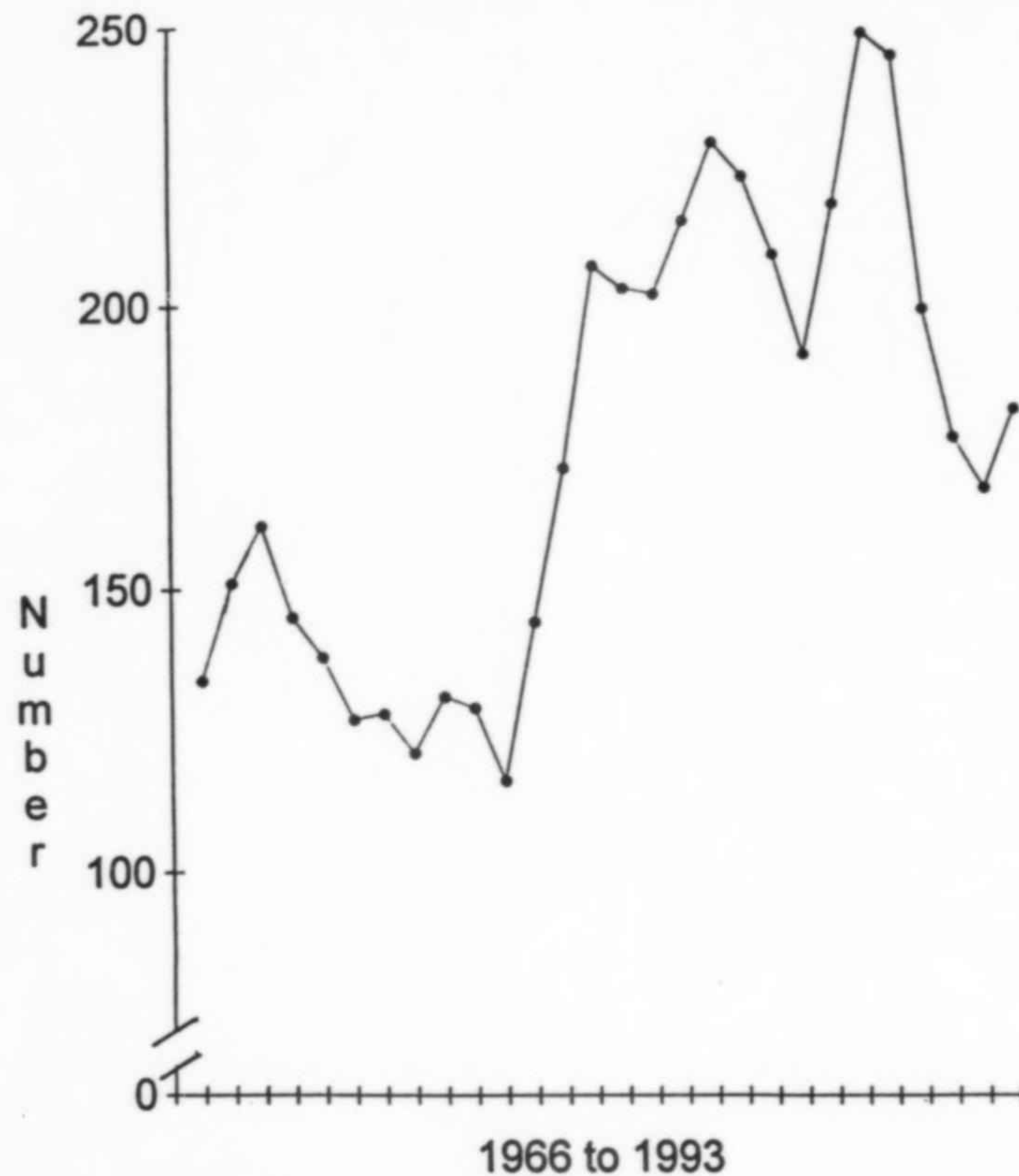


Figure 10. Worldwide trends in killer weather, 1966-93 (rolling three-year totals). Source: U.S. Office of Foreign Disaster Assistance.

As shown in Figure 10, international killer weather dramatically increased beginning in 1977 and peaked in 1988, the year predicted in PVs. These data tend to support the New Age Effect.

Two additional kinds of disaster were not mentioned by either Kenneth Ring (1982, 1985, 1988) or Margot Grey (1985): fires and accidents. These disasters may not have been seen in the PVs, or may not have been mentioned to Ring and Grey. Figure 11 shows that disastrous international fires began to rise in 1976 and started to decline in 1987. These data also support the New Age Effect. Figure 12 shows that the rise in international accidents peaked in the predicted year and then began to decline. The form of the trend and the predicted peak year support the PV predictions.

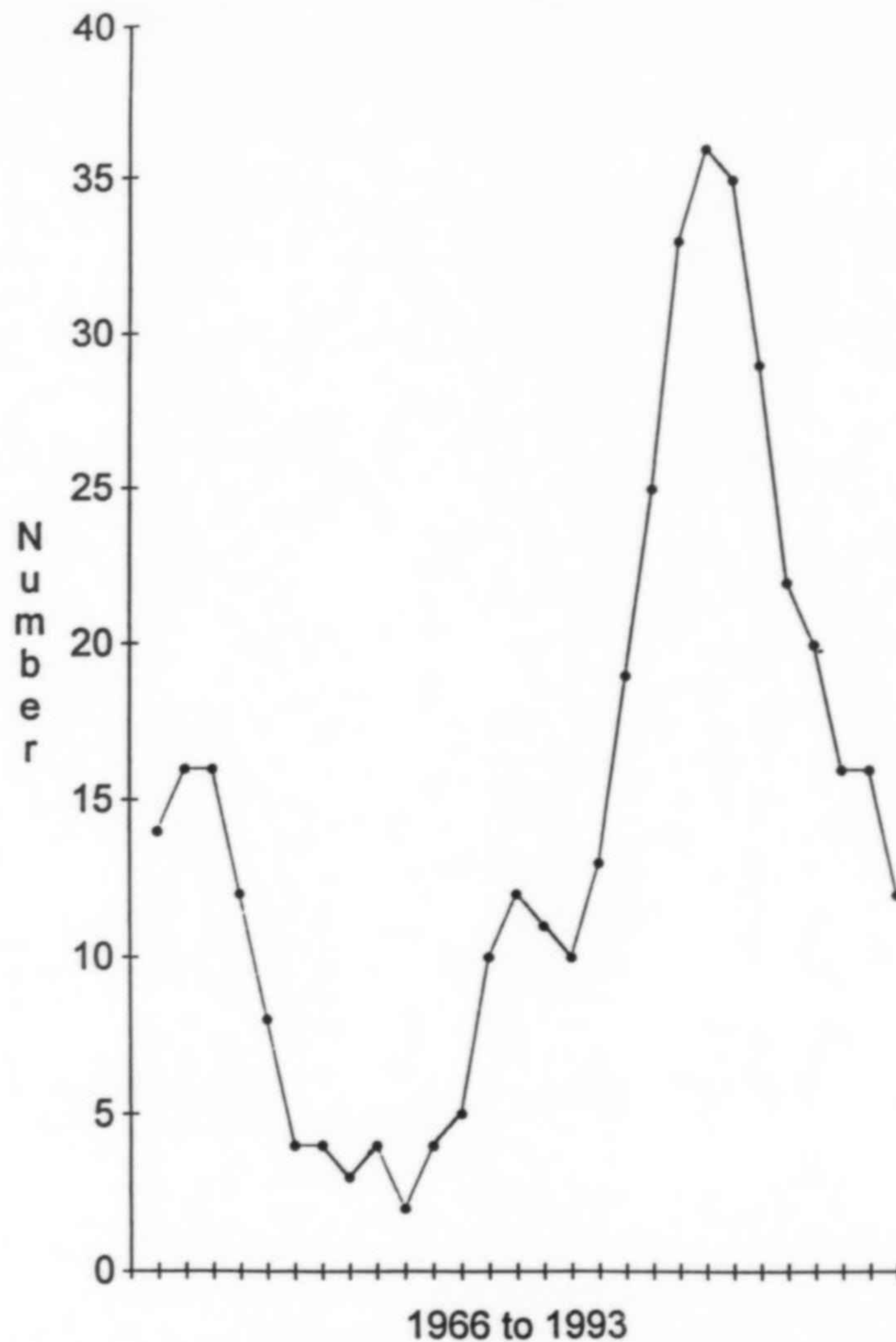


Figure 11. Worldwide trends in disastrous fires, 1966-93 (rolling three-year totals). Source: U.S. Office of Foreign Disaster Assistance.

Discussion

Theoretically, trends can take many shapes: flat, random, saw-toothed, rising, falling, bimodal, and so on. It seems uncanny that 15 of the 17 trends examined above took the predicted form. Of all the possible years to hit highs or lows, it is doubly uncanny that these peaks occurred when predicted, and that disasters were correlated with trends in caring, as predicted. While I found data supporting

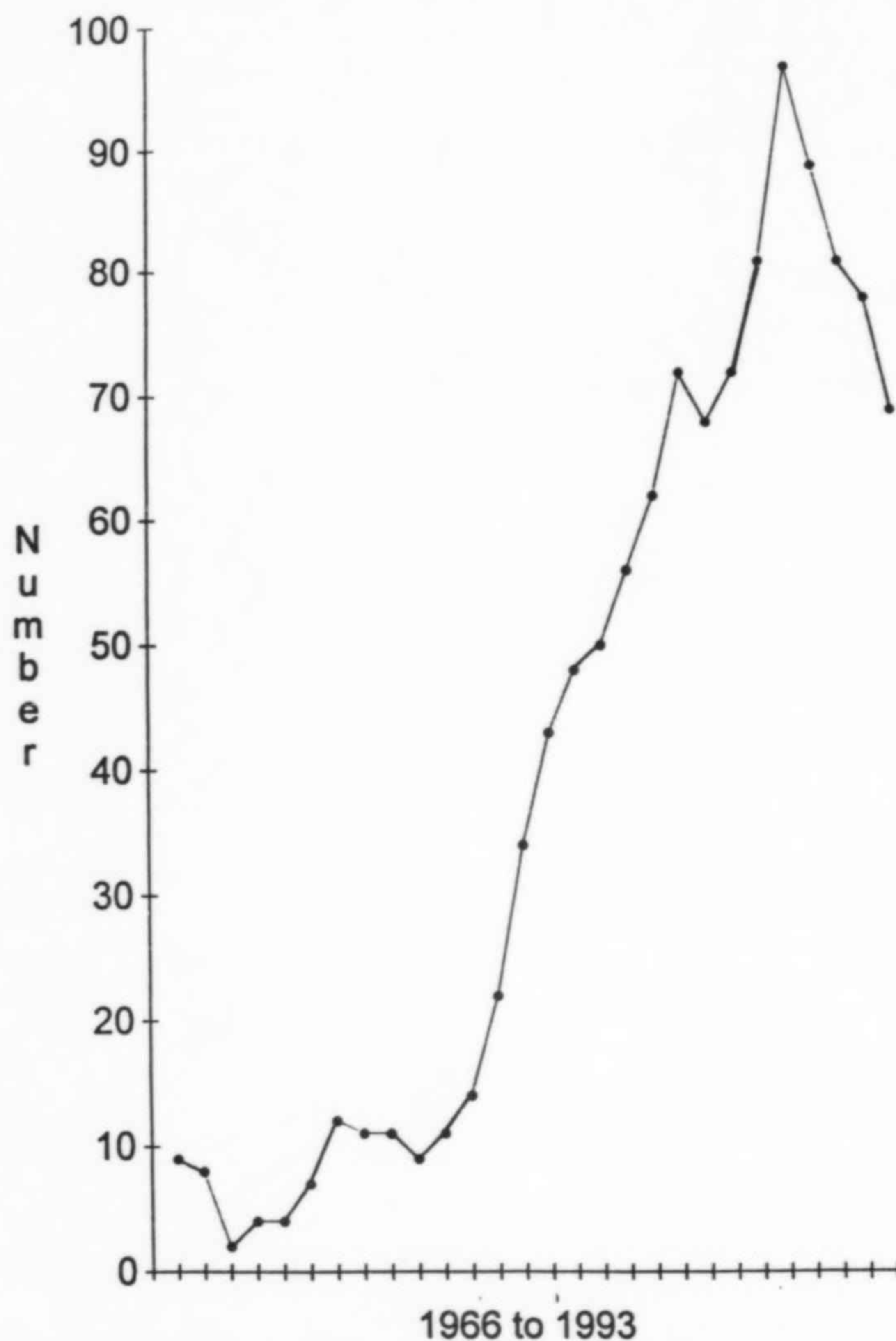


Figure 12. Worldwide trends in disastrous accidents, 1966-93 (rolling three-year totals). Source: U.S. Office of Foreign Disaster Assistance.

the hypothesized New Age Effect in every area where I looked, several critiques and alternative hypotheses should be examined.

Weakness of the Data

Most of the PV predictions were false: there was no pole shift, massive geological change, socioeconomic chaos, or nuclear war. The

observed peaks in fires and accidents were not predicted. There are no reliable data on United States disaster trends, which PVs did predict, and no data on global changes in religiosity or caring for others. At most, what remains is a chauvinistic view that American consciousness controls the fate of the world.

But while the apocalyptic predictions did not come to pass, the New Age Effect was predicted to modify the disastrous outcomes. Trends in three measures of caring and worldwide disasters broke in the critical period of 1987-88. The inclusion of unpredicted areas (accidents and fires) strengthens the hypothesis by showing that the New Age Effect generalized to other areas not mentioned in PVs.

On the other hand, partial disconfirmations are not sufficient to justify discarding the majority of supporting data. Science builds on imperfect, probabilistic data to create progressively more adequate theories that allow increasingly accurate descriptions, predictions, and control.

On the other hand, just as reality is more complex than our theories, the evolution of the planet is more complicated than portrayed in the PVs. PVs may be seen as allegories to teach a moral lesson, the *McGuffey Readers* of visionaries. The plot is simplified and exaggerated to clarify the message. Events are created to dramatize basic truths and to inspire readers to change.

One of the truths in the PVs appears to be the hypothesis that the quality of our consciousness and actions is causally linked to the rate of worldwide disasters. In spite of imperfect data and PVs that are somewhat veiled, there are strong negative correlations between measures of religiosity, caring for others and the planet, and several types of disasters.

Coincidence or Magical Thinking

Calling these correlations "coincidence" assumes there is no explanation to be found, thus effectively stopping theorizing and research. That is a decidedly anti-intellectual position. Calling these correlations "magical" comes from an overly simplistic notion of causality as a single line of links in a chain. Modern field theories open several alternative explanations. The probability of so many "coincidences" is extremely remote. It is easier to believe the New Age Effect than to believe in coincidence.

"Super ESP"

Changing the name of this phenomenon from PVs to "super ESP" does not advance understanding, prediction, or control. "Super ESP" implies transcendence of time, space, causality, and the limits of our senses, just as PVs do. Both explanations challenge current scientific paradigms, and both raise the possibility of the survival of consciousness beyond physical death.

Unconscious Projection of Existing Trends into the Future

The rise in worldwide killer weather began before 1980. NDErs, who must have been aware of this, may simply have extended the trend in the form of a lucid, archetypical dream.

If NDErs were aware of planetary trends, however, why were they wrong in their predictions about increased earthquakes and volcanos, and why were they not aware of the increase in accidents and fires? The "unconscious awareness" hypothesis does not explain predictions of the critical years for a turning point, nor the predicted correlations between disaster and religiosity trends.

Disasters Naturally Teach Humility, Interdependence, and Religiosity

The trend data showed that measures of caring increased after increases in killer weather, fires, and accidents. It is true that altruism and heroism, not looting and rioting, are the dominant reactions to disasters. Government responses to disasters inevitably are delayed. In the interim, local resources are donated to relieve suffering and save lives. Private voluntary organizations often provide more and faster aid than do governments.

These typical consequences change attitudes and relationships away from selfish interests and toward the welfare of others, away from the boundaries of caste and class and toward cooperation for mutual benefit, away from faith in national politics and toward local cooperation and international interdependence. The causal relationship between disasters and caring is understandable without resorting to mysterious effects (Cornell, 1982; Raphael, 1986).

This natural response to disasters could explain these correlations if caring rose with increasing disasters. It did not; caring continued to rise as disasters decreased. Nor can this hypothesis explain how NDErs who had PVs selected the critical years for trends to break.

The So-called New Age Effect Is Not New

In fact, the New Age Effect is ancient and continuous. In the Torah, disasters were a punishment for turning away from God (for example, the Flood and the destruction of Sodom and Gomorrah) and an inducement to do the right thing (for example, the 10 disasters sent to change Pharaoh's decision and free the Jews). Warnings of "repent or suffer" were made by Amos, Isaiah, Jeremiah, Malachi, Micah, and Saul. John's revelation predicted a New Age after painful lessons were to be learned from Armageddon, the apocalypse, and a false prophet. This archetypal prophesy has been repeated by founders of religions, Nostradamus, Edgar Cayce, and recent channelers, often focused on the year 2,000 (Noorbergen, 1984).

The term New Age Effect was not meant to denote the trendy, recent "New Age" music, books, and workshops. It denotes the ancient claim that levels of collective consciousness are causally related to disaster rates, that godlessness, greed, and sins against the planet cause catastrophes, and that turning to God, waging peace, and promoting altruism will usher in the New Age. The ancient idea of the New Age Effect challenges modern paradigms. For serious scientists, prophecies are the frozen yogurt of futurism.

Conclusion

Do the remarkable correlations of predicted peaks and troughs in trend data prove that consciousness survives death and enters a realm where cosmic history and the future can be known? Do they prove the apocalypse inevitable, as portrayed in the PVs, and only delayed? Can the apocalypse be avoided by greater godliness, generosity, and stewardship of the earth? Does love ultimately rule the world? These questions urge further tests of the New Age Effect.

Such tests are possible. First, global data on other predictors can be gathered, for example, changes in international foreign aid, religious fundamentalism, and destruction of old forests. Second, it is pos-

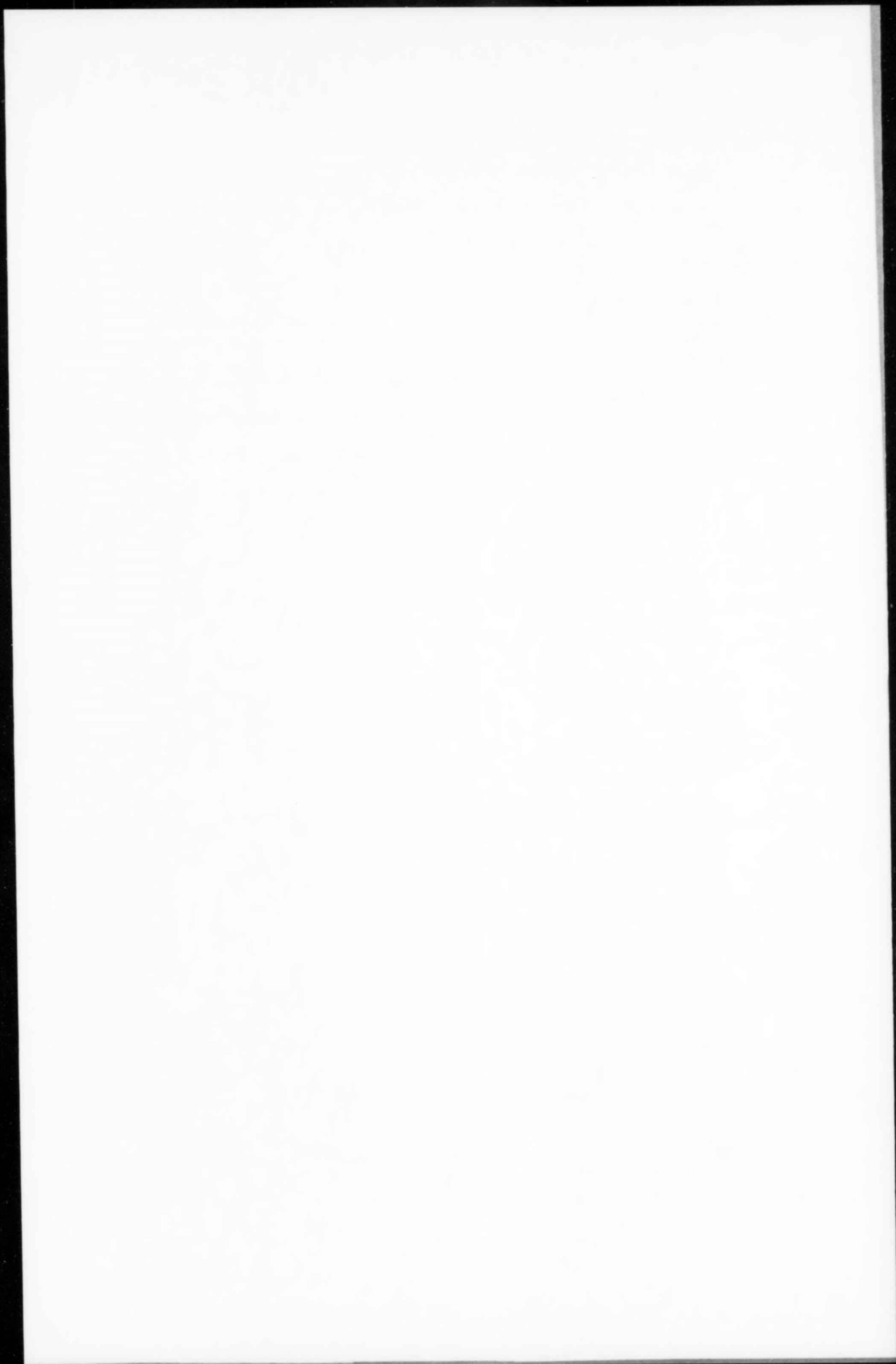
sible to study the New Age Effect at the national, state, and even college campus level. Carefully controlled studies have shown that Sidhi meditation by as few as one hundredth of one percent of the population of a city or nation is related to reduced crime rates, motor vehicle fatality rates, homicide and suicide rates, fetal mortality rates, hospital admission rates, and fires. The meditation period was compared with the same length of time before and after, with rates during comparable dates in previous years, and with other cities and states (Dillbeck, Banus, Polanzi, and Landrith, 1988; Dillbeck, Cavanaugh, Glenn, Orme-Johnson, and Middlefield, 1987; Dillbeck, Landrith, and Orme-Johnson, 1981; Orme-Johnson, Gelderloos, and Dillbeck, 1988). Local predictors might include religiosity, altruism, and environmental protection policies.

At present there are sufficient data supporting the New Age Effect to take it seriously, and there is room for doubt. Neither scientific predictions or mystic prophecies ever are 100 percent accurate. Thus, even after further research, we will remain where we have been, on our own to choose a response to each new prediction, and through our responses, inescapably, to create the future.

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The Near-Death Experience: A Study of Its Validity

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ABSTRACT: An Italian translation of Greyson's (1983a) NDE Scale was administered to 125 individuals who had been resuscitated at a hospital in Italy. By NDE Scale criteria 37.5 percent of those who returned the questionnaire had authentic NDEs. These data suggest some limitations to Greyson's NDE Scale and recommendations for future research.

The purpose of this article is to verify the frequency of near-death experiences (NDEs) among those who come close to death, using what is proposed to be the most appropriate scale, and to show the correlations of the contents of NDEs among those who report undergoing such phenomena. An NDE may be best defined as the experience of those

people who have been seriously injured or ill but unexpectedly recovered and by people who had anticipated imminent death in potentially fatal situations but escaped uninjured. (Greyson and Stevenson, 1980, p. 1193)

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In order to understand what the NDE implies, we should take into consideration that the research indicates that NDEs "include strong positive affect, dissociation from the physical body, and transcendental or mystical elements" (Greyson, 1983a, p. 369), more specifically

a conviction that one did indeed die; an impression of being outside the physical body; an impression of passing through a dark, enclosed space; apparent extrasensory phenomena; apparent encounters with persons not physically present; an impression of entering some un-earthly realm of existence; and a review of past events, or "panoramic memory." (Greyson, 1983b, p. 376)

The Study

The objectives of the study were to draw attention to the percentage of subjects who recall a near-death experience, to present the contents of NDEs in the cases under study, and to check the reliability of a particular method of studying NDEs. The contents of NDEs were assessed by the NDE Scale developed by Bruce Greyson (1980a). This scale is considered the most reliable method of studying NDEs to date, given the various changes which resulted from the scientific tests carried out to validate the method.

Subjects

Each of the 125 proposed subjects in this study had one or more experiences of recovery in a resuscitation department. The circumstances of their coming close to death were varied, including cardiac arrest, cerebral hemorrhage and other strokes, head trauma, various forms of poisoning, anaphylactic shock, postoperative complications, eclampsia, tetanus, serious respiratory insufficiency, and comas of various etiologies.

Of the 125 proposed subjects, 71 were male (56.8 percent) and 54 were female (43.2 percent); they were of a mixture of ages and social backgrounds.

Procedure

This study was conducted from May, 1989, to February, 1990, in the resuscitation department of the Hospital U.S.S.I. (Unita Sanitaria Locale) 61 in Savigliano (CU), Italy. It was the object of a degree

thesis by Enrica Zampieri at the University of Padua, under the supervision of Carlo Semenza and Aureliano Pacciolla.

Questionnaires were mailed to subjects with a prepaid return envelope. The questionnaire included an open-ended question inquiring about the nature of the experience, as well as Greyson's (1983a) NDE Scale, an instrument that has been shown to have high internal consistency, split-half reliability, test-retest reliability, high correlation with Kenneth Ring's (1980) Weighted Core Experience Index (WCEI), and a capacity to differentiate between authentic NDEs and organic mental syndromes or nonspecific stress reactions. The NDE Scale is made up of 16 questions with 3 possible responses each; a response definitively indicating the presence of an NDE element is awarded 2 points, an ambiguous response indicating the possible presence of an NDE element is awarded 1 point, and a negative response indicating the absence of that NDE element is awarded 0 points. Subjects who score a total of 7 or more points out of a possible 32 are considered to have had an authentic NDE.

The NDE Scale is divided into four sections to bring out the four essential components of NDE: the cognitive component, which highlights an accelerated perception of time and of one's own thoughts, the remembering of one's past (with a panoramic view of one's life), and an understanding of one's self and of the world; the affective component, which focuses on the sensations of peace, harmony, joy, and light, sensations that are often described as extremely pleasant; the paranormal component, which deals with the sensation of being separate from one's own body, and with the capacity to foresee the future and to experience events happening in other places; and the transcendental component, which has to do with the sensation of having met other persons or "beings" in places other than the usual ones, and with the ways in which subjects "return to life."

Results

Of the 125 subjects to whom questionnaires were sent, 64 (51.2 percent) completed the questionnaire. Of the 61 potential subjects who did not return the questionnaire, 32 had died.

The average age of the 64 respondents was 44.4 years. Of those 64 respondents, 38 were male (59.4 percent) and 26 were female (40.6 percent). All of them declared themselves to be Roman Catholic (as do 95 percent of the population of Italy). Respondents described

Table 1
Percent of Definitive, Ambiguous, and Negative
Responses to Cognitive and Transcendental
Component Questions

	<i>Cognitive Component</i>	<i>Transcendental Component</i>
Definitive response (indicating NDE element)	11%	23%
Ambiguous response (indicating possible NDE element)	28%	33%
Negative response (indicating no NDE element)	61%	44%

NDEs that had occurred over a period from 3 months to 10 years previous to the questionnaire. There were no significant statistical correlations between the sex of the persons studied and the medical circumstances of the close brush with death, and NDEs.

Of the 64 subjects who completed the NDE Scale, 24 (13 male and 11 female) had a score of 7 or more; that is 37.5 percent of respondents who had come close to death had an authentic NDE, according to Greyson's criterion. In the open-ended question, those who had a score of 7 or more (unlike those with a score of less than 7) described their experience as "an emotionally intense experience."

Among the four components of the NDE, the highest average score was found in the transcendental component, while the lowest was in cognitive component, as indicated in Table 1.

Although the four questions measuring the cognitive component collectively had the fewest number of positive responses, item 3, addressing the review, was answered positively by 50 percent of respondents: 42 percent remembered many past events during the experience (the ambiguous response), and an additional 8 percent had their past flash before them, totally beyond their control (the definitive response).

The questions that received the greatest percentage of definitive positive responses were item 8, seeing or feeling surrounded by a brilliant light, and item 16, coming to a border or point of no return. For item 8, 46 percent reported a light clearly of mystical or other-worldly origin, and an additional 12 percent reported an unusually

bright light. For item 16, 46 percent described a barrier they were not permitted to cross, or being "sent back" to life involuntarily, and an additional 12 percent reported a conscious decision to "return" to life.

The questions that received the greatest percentage of negative responses were item 1, time distortion, and item 10, ESP during the NDE. For each of these two items, 71 percent of respondents reported no such experience.

On the other hand, the questions that received the lowest percentage of negative answers were item 5, a feeling of peace or pleasantness, and item 14, seeming to encounter a mystical being or presence.

Discussion

The results of this study seem to confirm that the NDE is not dependent on personal or demographic factors. The person's gender, age (either at the time of resuscitation or of the study), socioeconomic status, and the conditions and causes of the crises that precipitated the experience are independent variables with respect to both the occurrence and contents of NDE.

Furthermore, according to this study, on the basis of the NDE Scale 37.5 percent of those who answered the questionnaire can be regarded as having had an authentic NDE. This estimate comes close to the 41 percent found by Michael Sabom in his research (1982).

The most important limits of the present research are those inherent in the small number of subjects and in the brevity of the questionnaire: only 16 questions, each with 3 possible responses, and one open-ended question. Other limits of this study, and indeed of most near-death research, are the absence of a specific psychodiagnosis and of personality tests both before and after NDE. Moreover, it cannot be deduced from this study that the NDE is independent of religious belief because, as already indicated, all the subjects declared themselves Roman Catholic.

In future studies, it would be interesting to clarify why it is that not all those who come critically close to death go through or remember an NDE. Research is needed to test the hypothesis of a difference in psychic structure between those who do and those who do not recall an NDE in connection with their experience of being close to death. Further clarification might also come from studies of groups

where members are of different religious beliefs, but have similar pathology and/or have been administered the same drugs.

Conclusion

In regard to its initial objectives, the present study has reached certain conclusions:

First, not all of those who have been close to death report an NDE; the proportion who do is 37.5 percent.

Second, it can be confirmed that the experience and contents of NDE retain a certain similarity despite differences of age, sex, socioeconomic conditions, and the cause of the near death experience.

Third, the contents of the NDE are those foreseen in the four subdivisions in Greyson's NDE Scale. However, the least characteristic component in this study was the cognitive one, and the least characteristic phenomena were time distortion and telepathy.

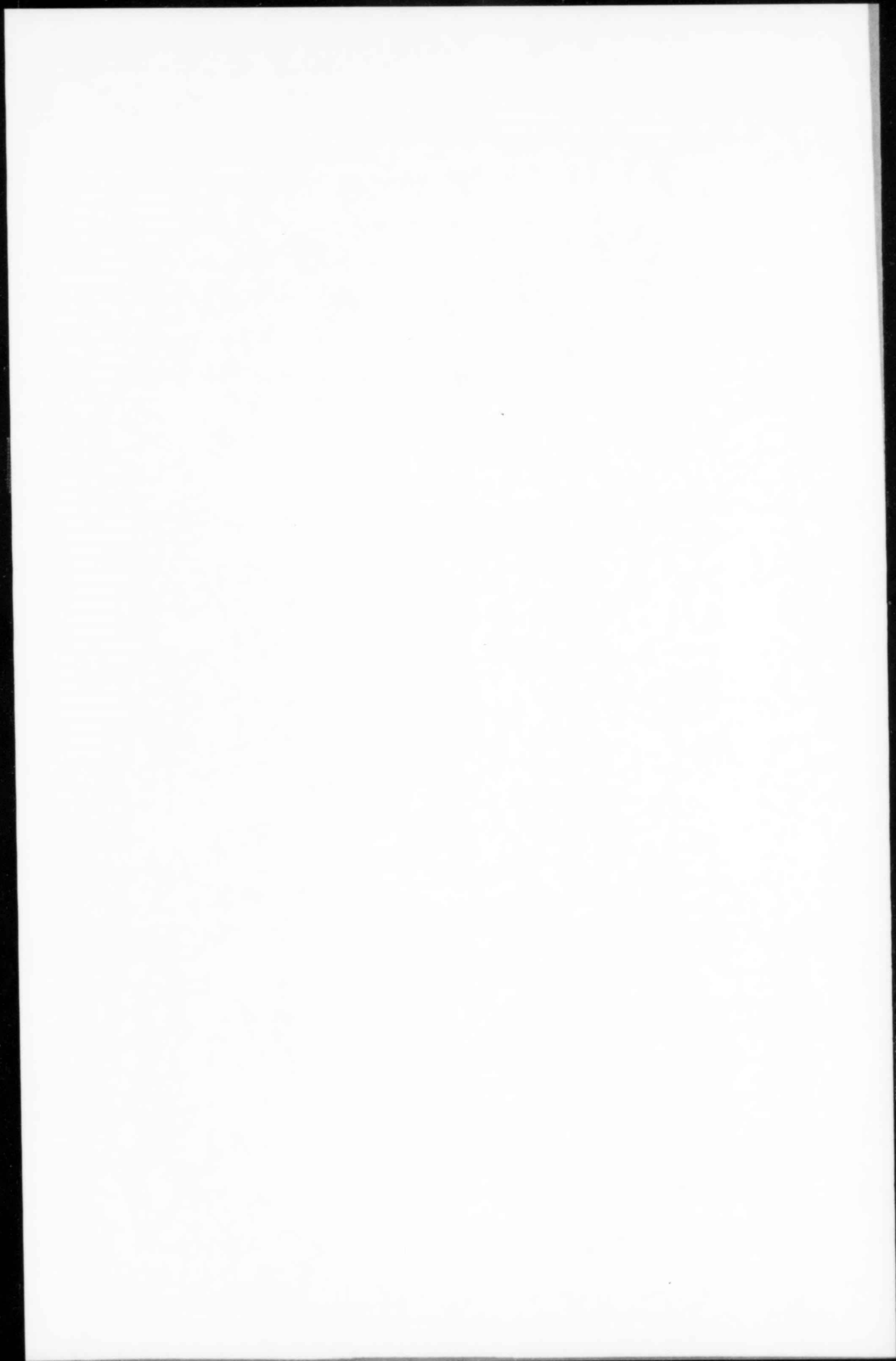
The most characteristic component of the NDE in this study was the transcendental, and the most characteristic phenomena were a particularly bright light from some mystical source, and the sensation of coming to some boundary or barrier preventing the person from going any further or a conscious decision to come back into life. Two other experiences particularly typical of NDEs were the sensation of well-being and a sense of being in a mystical unfamiliar place.

We cannot exclude the possibility of other characteristic phenomena of the NDE not foreseen in Greyson's NDE Scale. Indeed, undoubtedly there are others that may be difficult to verify because they happen after the NDE, as in the case of changes in lifestyle and values, the acquisition of paranormal capacities, and the development of new levels of sensitivity, such as a heightened sense of hearing or smell.

And finally, the reliability of the means of investigating NDEs has to be regarded as still inadequate. The data from this study suggest that Greyson's NDE Scale should be modified, especially in regard to the cognitive element, and should be extended. If Greyson's NDE Scale, which is the most widely supported questionnaire in scientific circles, is to be regarded as not yet sufficiently reliable, the results of other questionnaires that do not have the scientific support of his clearly cannot be regarded as sufficiently reliable.

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ECT: TNT or TLC? A Near-Death Experience Triggered by Electroconvulsive Therapy

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ABSTRACT: I report an experience in the course of electroconvulsive therapy (ECT) that was indistinguishable from an NDE. Aspects of the experience that had been terrifying for the individual were counterbalanced by her immediate and complete recovery from a suicidal depression. Beyond the transpersonal aspects of her NDE-like experience, the ECT triggered a precognitive vision that materialized two years later.

Now, my own suspicion is that the universe is not only queerer than we suppose, but queerer than we can suppose . . . I suspect that there are more things in heaven and earth than are dreamed of, or can be dreamed of, in any philosophy. That is the reason why I have no philosophy myself, and must be my excuse for dreaming.

J. B. S. Haldane, *Possible Worlds* (1927)

Prelude

This intriguing story first came to light following a psychology class that had come to life with a question about near-death experiences (NDEs). One student, a woman in her mid-30s, lingered after the others had left. What I had said about NDEs, she said, was so much like what happened to her that she felt she had to tell me about it. She stressed that she had never before shared the experience with anyone because she knew they would just think she was crazy.

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Four years earlier, she went on, she had had a nervous breakdown and was in a deep suicidal depression. Her physician, despite her protests and pleadings, had arranged to have her committed to a nearby mental hospital (not the psychiatric treatment center where currently I practice psychology). The hospital's admitting psychiatrist prescribed electroconvulsive therapy (ECT), insisted it was the intervention of choice, and booked her for a series of treatments.

Having heard horror stories of "fried brains" and memory bankruptcy, and with visions of hollow-eyed zombies dancing in her head, she begged her doctor not to put her through what she had always thought of as her worst nightmare. He did his best to reassure her that ECT really wasn't all that bad and could be counted on to relieve her depression. She might have a bit of a headache for a few hours, he said, but they could give her something for that.

On the morning of her first and, as it turned out, only treatment, the nurse who arrived to "prep" her with premedication was assailed with further protestations and pleadings. The nurse did her best to comfort and reassure her while injecting the drug. Within seconds, the "twilight sleep" had set in and the patient found herself floating limply—in a sea of panic. Though she was sure she had appeared relaxed and calm on the surface, as she put it, "all hell was breaking loose underneath." Anger, she said, had been her only defense against overwhelming anxiety.

The anesthetic she saw as having revoked her will as it robbed her of all control of her voluntary muscles. Immobilized, her anguish dissolved into a buzzing silence of fear and quiet desperation. Paralyzed though she was by the medication, her awareness of everything going on around her was undiminished. Not only did she remain wide awake and fully conscious, she was "hyperaware," but could not so much as lift a finger or an eyelid to prove it to anyone. She described the feeling as "worse than a nightmare, like being raped."

A second nurse arrived to assist in lifting her onto a stretcher for the short trip to the treatment room. She struggled within to scream at them to stop, but found it impossible to move a muscle or make a sound. Fear turned to terror as they wheeled her down the corridor. She was intently aware of every word spoken along the way, of clicks of the wheels over joints in the floor, of the subtlest of smells, and of shifting shades of light and shadow playing on her closed eyelids. But it was the metallic taste of her own fear that she recalled most vividly. The apparent disregard of her plight by all concerned compounded the anxiety.

The psychiatrist and his assistant were awaiting her arrival in the ECT room with their equipment warm and humming, and it was with pained amusement that she recalled being wheeled in and overhearing the two talking about golf. The doctor lifted her flaccid arm and let it drop, noting to his colleague that she was almost ready. As she fought vainly to cry out that she was not ready, he raised one of her eyelids and beamed a penlight into her pupil as he proceeded with his routine.

Glaring past the light directly into his pupil, she strained to communicate wordlessly through sheer force of rage that she had had enough and wanted out of there, but was unable to move or make a sound. As her eyelid was released, the shutter of her mind snapped, and the darkness closed in on her. It was then she knew there was no hope of rescue or escape. Bracing herself as best she could with thoughts of loved ones who still cared, desperately she tried to prepare herself mentally for the worst. No prisoner about to die in the electric chair, she told me, had ever been more terrified.

The electroconductive paste was applied and the clamp with its harness of wires was set to press tightly against her temples. With the requisite injection of the muscle relaxant, a tidal wave of panic swept through her, driven by the cessation of her breathing, and she was left without a shred of doubt that she was about to die—or worse. Her sense of helplessness, she said, was absolute, and to abandon hope and welcome death seemed her only way out.

She felt doubly enraged, she said, that her caregivers were making her predicament all the more terrifying by going through the motions of a mechanical routine: straps cinched, patient secured; mouthpiece clenched, airway assured; ground-patch attached; foam grips in fists; switch tripped; end checklist.

In a split second, the juice hit. Billions upon billion of neurons ignited simultaneously, and a thousand suns exploded inside her head. For a few excruciating seconds, the conflagration raged as the electric current flashed across her brain lobes, and in that timeless moment of ego immolation, she had been, as she put it, "to hell and back." The pain, she testified, was unimaginable, but thankfully was over almost before it began, having burned itself out in the electrical storm that triggered her convulsions—though it might have lasted for eternity, for all she knew at the time.

She had no recollection of the seizure itself, or of the moment the oxygen mask was placed over her mouth and nose, but she said she would never forget the moment of grace when the saving gas flooded

her lungs and washed the blues—of her skin—away. And the brain-storm that followed the lightning flash, she was soon to discover, had blown away years of accumulated clutter from the furrows of her mind.

The Near-Death Experience

No sooner had the pain disappeared than, trite as it may sound, she found herself rushing down a long, spiraling tunnel toward what she described as an overwhelmingly brilliant, dazzling pinpoint of light. The ambivalence she felt in approaching the light was fraught with desire and dread so deep and so high she saw it as being "of cosmic significance." The holding back and letting go were pitted against each other in an archetypal struggle, a harbinger of Armageddon, with all the agony and ecstasy of heaven and hell. The desire to let go and go into the light and her agonizing dread in resisting were one and the same. She knew it sounded insane, she said, but anxiety and ecstasy were exactly the same, "not opposites at all—just mirror images of each other."

Suddenly the rush of shooting down the tube toward the light was interrupted, the tension broken, by the intrusion of a lifelike scene, as if on a cinema screen enclosed within the tunnel and appearing as a barrier between herself and the light. She described it as "a sort of gossamer T.V. screen" that momentarily blocked her passage with a vivid, sharply focused, full-color, fluid-motion, three-dimensional scene from her childhood. Instantly, she recognized it as an exact "re-creation," an instant replay, of her fifth birthday party, with every detail intact, precisely as if she were viewing a movie of the original event, but with all the substantiality and sensations of virtual reality. "It wasn't just remembering the way it was back then," she insisted, "I was there!"

The scene, at first, was observed from a distance. As she moved closer, continuing down the tunnel, she perceived the images coming fully into focus as she merged with the scene, was five years old all over again and, once more, was thoroughly enjoying the celebration.

Although she said she could never have remembered highly specific particulars of names and games, laughter and talk, treats and gifts, it remained perfectly clear to her four years later that her reprise of the event in the tunnel was precisely the way everything had hap-

pened in the backyard of her family home 30 years before, accurate down to the most minute detail.

Having "relived" the entire party in what she guessed to have been no more than 10 to 15 seconds, real time, she passed on through the scene, was again rushing headlong down the tunnel unhindered by distractions, and it felt to her as if terminal velocity of that "rush" might have been near the speed of light.

Presently, another moving picture from her past zoomed into focus on that incorporeal screen obstructing her passage on her way to the light. This time, she was at her high school graduation ceremony, with all her classmates in their caps and gowns and the teachers and parents looking very pleased and proud. Again, she insisted it was not mere abstract remembering, but a concrete reliving of the original event, exactly as she had experienced it some 17 years earlier. She stressed that it was as different from ordinary memory and visual imagery as reading a menu is different from eating a meal. At the very least, it was clear evidence of a photographic memory she had never known she possessed, or it might have passed for the most lucid of dreams. Still, the feeling persisted years later that she had experienced a literal revisit to the past, a "rematerialization" of the actual event.

As the second of her reconstituted "rites of passage" faded back into the past and rapidly receded behind her in the tunnel, her speed increased as she was drawn toward the light "like a speck of dust in a vacuum hose."

Other scenes from her past were described in less elaborate detail, but she insisted they were no less complete. As was so for the birthday party and graduation ceremony, each definitive image within the multiplicity of scenes was perceived as having arisen from, and coalesced in, patterns of dark/light ambiguity superimposed on her bedazzled perception of the light at the end of the tunnel.

Likewise, there was every appearance that the lifelike movement of images within scenes was created in the interplay of shifting figure/ground relationships within patterns that had originated in ambiguity and culminated in lucidity. And each scene that had intervened to that point, she said, corresponded in every particular to crystal clear memories of events that had taken place earlier in her life.

She had come to view the phenomenon with great fascination and a natural assumption that the intruding scenes intermittently disrupting her progression toward the light evidently—necessar-

ily—were derived from personal memories of past experiences. But that "illusion," she said, was shattered by the startling materialization of an event unlinked to her past, and having no discernible connections in conscious awareness.

As she drew closer and blended into that baffling apparition, suddenly she was at a cocktail party, "as real in every respect as any party I have ever attended." Describing the scene in intricate detail, she recounted how she was escorted into an elegantly-appointed living room in a spacious, unfamiliar home, was introduced to a small group of guests and was welcomed by a sophisticated-looking woman in a black, satin dress, holding a cigarette in one hand a highball glass in the other. Next to her was a man wearing a houndstooth sports jacket, sipping a martini. Others in the circle were described in similar detail, and she recounted verbatim the conversation that followed. A fire blazed in a fireplace, and the entire scene was in living color, with full-surround sound, and in three-dimensional solidity, "indistinguishable from real life." Prior to the ECT, she said, she had never observed or experienced anything remotely resembling the occurrence, and had no conscious memories corresponding to anything or anyone at the party.

Having passed through that puzzling vision, once again she was shooting unimpeded toward the light. Other scenes, in turn, appeared and disappeared. Then there were no more disruptions or intrusions of scenes to distract her gaze or brake her speed; and the threat of being swallowed up and consumed in the light loomed as the imminent, and ultimate, horror.

Drawn, "as if by an inconceivably powerful electromagnet," into that blinding radiance, her terror mounted and matched the light in intensity as she shot down the tunnel with such acceleration, "it felt as if I were being sucked into a black hole in space." And though it was "a thousand times worse than even Dante's most horrifying images of hell," the desire to let go and go into the light was "infinitely compelling, absolutely irresistible."

The struggle had left her totally exhausted, with no energy left to fight against the light; and, having long since passed the point of no return, with courage born of desperation, she at last willed to let go and go into the light, knowing only that death would be release from "unendurable tension, unbearable anxiety."

It was then that she gave herself up to be burned away in the light, to die, to lose her mind, to be hurled into the belching mouth of hell, if that was what was to be. And finally having given up and

let go to go freely into the light, in a moment, "in the twinkling of an eye," she knew herself to be one with the light itself, and was lost—and found—in a state of "absolute ecstasy."

This time around, oddly enough, it was ECT that played "the sovereign Alchemist" beyond compute, that did, "in a trice, life's leaden metal into gold transmute." Tripped by a most unlikely "philosophers' stone," she had stumbled onto the Golden Fleece, the Holy Grail, the Pearl of Great Price, "All rolled into One."

Postlude

The next thing she knew, she said, her eyelids opened and she was staring up at the ceiling of her hospital room. Her depression was gone. And, she added with delight, from that moment until the moment four years later when she stepped forward to share her experience, no trace of depression had returned.

It wasn't until later, two years after the seemingly aberrant "tunnel vision," that her puzzlement as to the source of that disconcerting, "dreamlike" cocktail party scene became transformed into realization, and the entire experience was reframed as a small part of a much larger picture.

She had, she said, been invited to a party one evening—in "the real world of objective reality"—and, the moment she entered the host's living room, was astonished to discover everyone and everything exactly as had been observed two years earlier under ECT. The chic woman in the black, satin dress, the man in the houndstooth coat, the furniture and artworks, the fire in the fireplace—it was all there, exactly the same, with every detail precisely in place, save one. The single exception, she emphasized with a curious twinkle in her eye, was that "everything was in reverse—like the negative of a photograph."

Impossible as it may seem, ECT had, in some unexplained, perhaps unexplainable, way triggered a fleeting, yet perfectly clear, glimpse of her future, a glimpse that materialized two years later as a *déjà vu* with unmistakable historical roots, a pivotal experience she had come, by then, to speak of as "the turning point of my life."

After years of reflection on questions raised in regard to this gifted woman's ECT-induced NDE, at least three possible explanations come to mind in light of personal speculation and related reports in the NDE literature. First, the electrical stimulation itself may, quite lit-

erally, have been the illuminating factor. Neurosurgical pioneer Wilder Penfield (1955, 1975) elicited reports of out-of-body experiences and life reviews in response to right temporal lobe stimulation of the exposed brains of his subjects.

Second, the anesthesia may have played a role in inducing an idiosyncratically altered state of consciousness, or might actually have brought this individual to the brink of death. Her hyperawareness between anesthetization and electrical stimulation, while she appeared to be unconscious, is intriguing, and may suggest either that she received an insufficient dose of anesthetic (Blacher, 1984), or that her consciousness may already have undergone a radical, "transpersonal" shift into what some near-death observers have described as "Mind-at-large" (Grosso, 1985; Ring, 1992). Although her awareness while her body was paralyzed might suggest a separation of mind and body, the fact that she continued to perceive as if she were still lucidly conscious (e.g., seeing the doctor's pupil peering from behind his penlight) suggests that her consciousness and her body were still functioning as a unit at that point, even though her consciousness might seem to have been operating somewhat independently of her anesthetized brain. The literature contains numerous accounts of anesthesia-induced NDEs, including both intentional and serendipitous experiences, some blissful and others terrifying (Ring, 1988, in press; Rogo, 1984).

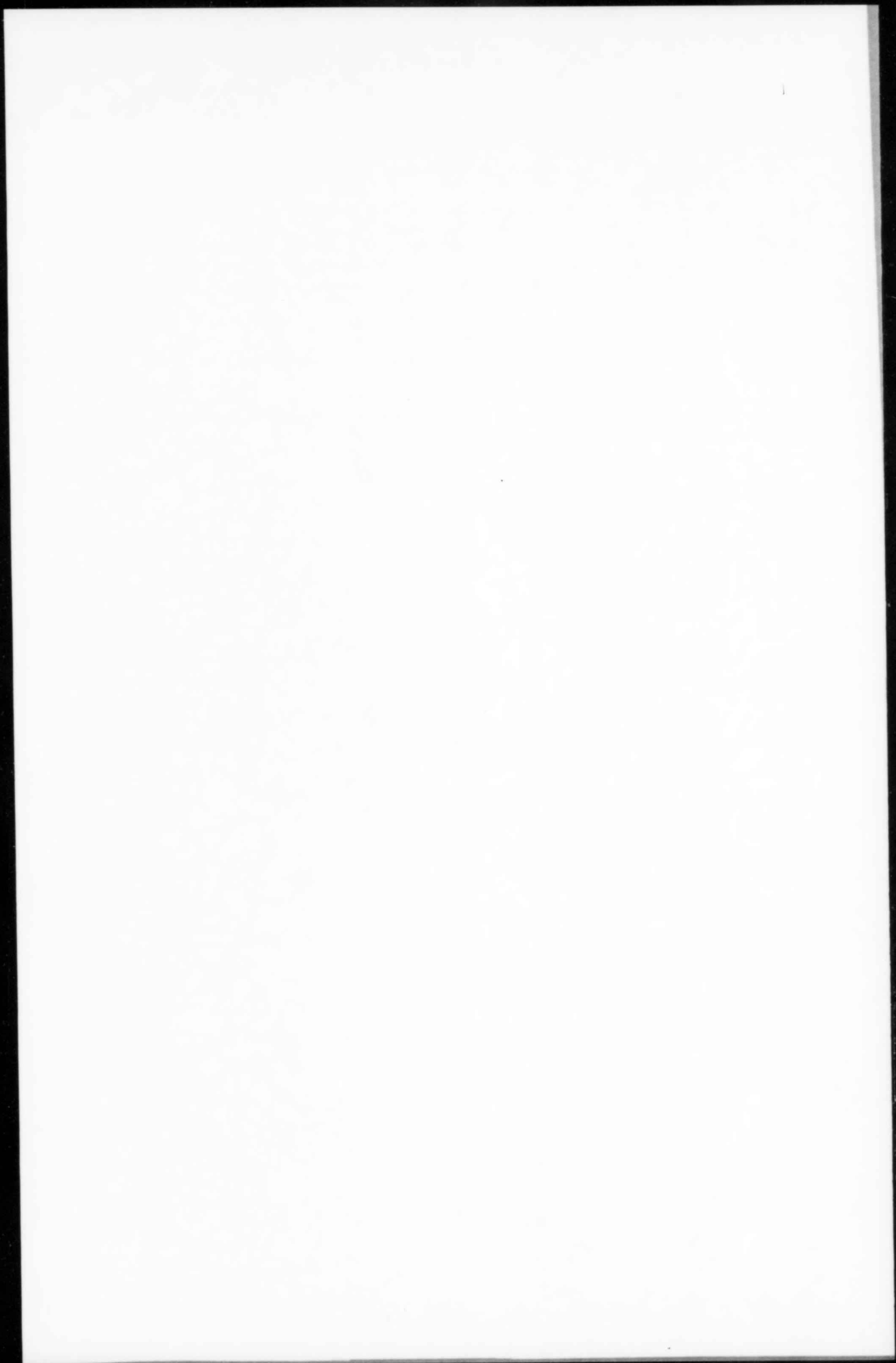
Third, this woman's conviction that she was about to die may have induced what has been called a "fear-death experience" (Stevenson, Cook, and McClean-Rice, 1989-90), an NDE-like experience brought on by psychological stress and presumed nearness to death without actual life-threatening physiological danger.

It is left to the reader to reflect on the possible significance and implications of this one individual's one encounter with ECT, to wonder about the paradigm-nudging anomaly she experienced in its wake, to realize that "enlightenment" and "lighten up a bit" are so close as to be indistinguishable in the dark, and to remember that one glimpse is worth a thousand reflections.

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BOOK REVIEW

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To Hell and Back: Life After Death—Startling New Evidence, by Maurice S. Rawlings. Nashville, TN: Thomas Nelson, 1993, 255 pp.

Seventeen years ago I (Sabom, 1979) reviewed a book from Thomas Nelson Publishers entitled *Beyond Death's Door*, by cardiologist Maurice Rawlings (1978). *Beyond Death's Door* described the distressing or, in Rawlings' words, "hellish" near-death experience (NDE). Although I critiqued Rawlings' research methodology and conclusions in my review, he is to be credited with alerting us to the presence of this type of NDE at a time when it had not generally been recognized. Rawlings' newest book, *To Hell and Back*, another Thomas Nelson publication, is a sequel to *Beyond Death's Door* (so Rawlings states on p. 9) and is the subject of this commentary.

I met Rawlings once on a television talk show in the early 1980s and found him to be pleasant and sincere. We share much common ground as practicing cardiologists who hold Fellowships in the American College of Cardiology. Needless to say, we both have been intensely interested in the NDE since the mid-'70s and have authored books on this subject (Rawlings, 1978, 1980, 1981, 1993; Sabom, 1982). We are both Christians, as well.

Within the Christian community, Rawlings has made considerable impact. *Beyond Death's Door* is currently in its 14th paperback edition, and *To Hell and Back* promises similar success. Thus, it was with great interest that I began my reading of *To Hell and Back*, in which the author, quoting Luke 1:4 in the New Testament, offers the reader "an opportunity to enter the arena of debate as I [Rawlings,

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like Luke] 'write an orderly account for you . . . so you may know the certainty of the things you have been taught'" (p. 43).

Before entering this "arena of debate" with Rawlings, however, I caution the reader that this commentary is not intended to be a comprehensive review of *To Hell and Back*. My intent is to examine the *substance* of this work from the standpoint of a near-death researcher. Specifically, I wish to assess the new information and data presented in the text, the accuracy and completeness of these data, and how these data compare to his own previous work and the work of others. I will not address Rawlings' discussion of religion and society. With this in mind, let us turn to an evaluation of seven points made by Rawlings in his book.

First, a major theme running throughout *To Hell and Back* is the author's repeated emphasis on the need to interview patients immediately after resuscitation:

If the interview is delayed just a little bit—much less days, weeks, or months after the fact—only the positive experiences will be found. (p. 33)

The truth remains that the negative reports are there (i.e., on the lips of the survivor), but the observer has to be on the scene to capture them before they are swept away into painless areas of the memory. (p. 67)

Rawlings then poses what to him is a crucial question regarding other near-death studies: "*Were any of the reporting authors present during the CPRs of these patients? Had any of the authors themselves performed the resuscitation?*" (p. 110, italics Rawlings'). Except for myself, no other researchers had been involved in these resuscitations. Rawlings carefully dissects my results, however, and finds that

Sabom . . . encountered no significant negative experiences, after looking at 30 of his 116 interviews (26 percent) sometime within the first month, six of them sometime within the first day. Of the positive reports, none of them were reportedly obtained on the floor or during the resuscitation, often the only time when negative cases can be detected. (p. 127)

Rawlings concludes of this work by me and others:

In spite of these glittering results, obtained from delayed interviews by personnel who were not there at the time of the events, there is, nevertheless, an occasional negative experience that slips through their coveted data. (p. 110)

Statistical bias results when the whole picture is not analyzed, especially when good experiences replace the converted bad ones. But

researchers seem recalcitrant and show no interest in the negative possibilities. (p. 99)

Thus, Rawlings sets the stage for his own study in *To Hell and Back* aimed at correcting this "defective method of data collection" (p. 34) by "recalcitrant" investigators. In this regard, Rawlings assures us that

the cases I will present were collected by professional people making on-the-scene interviews while CPR was in progress: doctors, nurses, and paramedics involved with ambulances, emergency rooms, and intensive care wards. (p. 29)

These new NDE accounts, we are promised, will then be added to the "several hundred patients summarized in the first book" (p. 32).

In my earlier review (Sabom, 1979) of his first book, *Beyond Death's Door*, I found that these "several hundred" cases were represented by only 21 cases of "heavenly" NDEs and 12 "hellish" NDEs. Many of these were clearly not from Rawlings' own practice, having been excerpted from other published sources. Others were simply left unidentified. In *To Hell and Back*, the cases appear similar, with most of his "new" cases not coming from Rawlings' practice or his referral network.

My best estimate from reading the text without any tables or listing of patients is that 32 NDEs are mentioned: 15 "hellish" cases and 17 "heavenly" cases. Twenty of these 32 cases were clearly lifted and referenced from other sources, and six were personally acquired examples used in his previous books. The remaining six NDEs appear to be new, previously unpublished accounts obtained from his own experience. However, two of these six cases were mentioned only in passing and never described.

Given the above, Rawlings seems to have gone out on a limb. After he demeans others' data as "glittering" and "coveted" and labels their method of data collection "defective" and "statistically biased," Rawlings offers six (more accurately, four) poorly documented new cases for study. He supplies no interview format, patient background information, or systematic data analysis as found in other studies he criticizes above. His statements such as "There is no relationship [of the distressing NDE] to occupation, education, or circumstance. Affluence has never altered the outcome" (p. 75) are substantiated with no relevant data.

More importantly, his basic premise that immediate post-resuscitation interviewing will yield a high percentage of "hellish" NDEs

that will later be repressed is unsupported by data, that is, data documenting in a series of cases the timing of the interview after the event. In fact, the cases he presents actually seem to favor the opposite conclusion: out of 15 "hellish" cases, ten (67 percent) were clearly shown to have been brought to Rawlings' attention long after the golden "first few minutes" following resuscitation, four were elicited at an unspecified time, and one (7 percent) was clearly noted as immediate. The reader is left to wonder why the overwhelming majority of these "hellish" NDEs were "late reports," reports that according to his premise should have been repressed and unreported.

Second, upon examining the NDEs actually obtained and reported by Rawlings, other problems arise. Scrupulous accuracy in the recording of NDE descriptions is essential, since the content of these experiences cannot independently be verified, except in rare cases of autoscopic NDEs with separate documentation as found in my book (Sabom, 1982, pp. 81-115). In *Beyond Death's Door*, Rawlings was careful to ensure the reported accuracy of one account by tape recording the interview (Rawlings, 1978, p. 97). The same account was then used again in *To Hell and Back* (pp. 56-57), but this time with multiple changes. The descriptions in both books were presented as first-person verbatim quotations, indented in the text to indicate the actual words of the NDEr. Information was deleted from the account in *To Hell and Back*, however, without any indication (for example, ellipses) that something was being left out. Also troubling was the frequent changing of the wording of the actual description of events found in both accounts. For example, in Rawlings' earlier book he quoted the patient as saying:

There was this young doctor in a white coat and two nurses and a black fellow in a white uniform and he was doing most of the work on me. This black fellow was shoving down on my chest and someone else was breathing for me and they were yelling to "get this and get that!" (1978, p. 79)

In *To Hell and Back* this same patient is quoted as having said:

There was this young doctor in a white coat and two nurses bent over me. The doctor was yelling "get this" and "get that!" (p. 55)

In the earlier book Rawlings quoted this patient as stating:

I didn't touch any of the walls. I emerged out into an open field and was walking toward a big white wall which was very long. It had three steps leading up to a doorway in the wall. On a landing

above the stairs sat a man clothed in a robe that was dazzling white and glowing. (1978, p. 80)

In *To Hell and Back* this quote reads:

I didn't hit any of the walls and at the other end I walked out into an open field. On the far side was this endless white wall which had three steps leading up to a doorway. I entered. Up on the landing sat the dazzling figure of an old man in glowing white robes. (p. 55)

In the earlier book, Rawlings quotes this patient as describing a "brilliantly lit city" as follows:

reflecting what seemed to be the sun's rays. It was all made of gold or some shiny metal with domes and steeples in beautiful array, and the streets were shining, not quite like marble but made of something I have never seen before. (1978. p. 80)

By *To Hell and Back*, this quote had become:

reflecting what looked like the rays of the sun, only diffused and suspended with particles of radiance. The roads were all made of gold. Some sort of shining metal covered the domes and steeples in beautiful array and the walls were strangely smooth, not quite like marble, but made of something I had not seen before. (pp. 55-56)

In Rawlings' first book, he quoted this patient as describing his return to life with these words:

As we approached the place where Jesus was located, I suddenly felt this tremendous surge of electricity through my body as if someone had hit me in the chest. My body arched upward as they were defibrillating my heart. I had been restored to my former life! (1978, p. 81)

In the version quoted in *To Hell and Back*, the patient's words were:

As we approached the next place, the place where Jesus was supposed to be, I felt as if I were hit and everything became dark. A jolting power went through my body and it hit me again in the chest, arching my body upward. I opened my eyes and grabbed at the heart machine's paddles before they could shock me again. (p. 56)

One may question whether such altered wording is of real significance; that is, does it really matter whether the NDEr saw streets made of "something I have never seen before" versus "gold"; or whether he saw the place where Jesus "was located" versus where he "was supposed to be"? I believe it matters in a major way! To say the "place where Jesus was located" implies He was *there*. To refer,

on the other hand, to a "place where Jesus was supposed to be" interjects an element of doubt or of subjective interpretation; it implies that the NDEr merely assumed Jesus *should* be there. Such alteration of meaning concerning the presence of Jesus is particularly important, since *To Hell and Back* deals with the *Christian* interpretation of the NDE.

Furthermore, from a research standpoint, alteration of the patient's report—that is, alteration of the data—violates a basic principle of the scientific method by changing the material meaning of an otherwise unverifiable observation and casting doubt on the credibility of the whole account. Similar discrepancies appear in the retelling of the account of a patient resuscitated at a football game; compare the account in *Before Death Comes* (Rawlings, 1980, pp. 128-129) with the account in *To Hell and Back* (p. 79). Published as first-person, quoted accounts, these reports are supposed to be *the* words of the NDEr, not of Rawlings nor of his editor. If the verbatim nature of these accounts cannot be trusted, any meaningful evaluation becomes highly questionable.

Third, discrepancies appear in the account found in both *To Hell and Back* and *Beyond Death's Door* of the Baptist Sunday school teacher who suffered multiple cardiac arrests and NDEs. (Rawlings confirmed in personal communication that this same account was reused in both books.) In *Beyond Death's Door*, we were told that

He experienced three different episodes of heart attack, three different episodes of defibrillation, three different after-death experiences. The first episode was terrifying; the next two were quite pleasing and even euphoric . . . *He died a fourth time* a few months later, from cancer of the large bowel. This condition was entirely unrelated to the repeated heart attacks. (1978, pp. 101 and 103, italics added)

In *To Hell and Back*, however, this same man

had three separate death experiences from three separate cardiac arrests, the first two from heart attacks. The last arrest was the complication of an unexpected cancer of the rectum, and we didn't try retrieval methods at that time . . . *At the third and final death*, both he and I were sure what the results would be. He was the one who was able to reassure me. (p. 76, italics added)

Thus, in *Beyond Death's Door*, three NDEs—one "hellish" and two "heavenly"—were described in detail followed by the fourth and "final death" from cancer. In *To Hell and Back*, the "hellish" NDE was followed by a second, "heavenly" experience and then a "third and final

death." This man's third, "heavenly" NDE—"pleasant and easily recalled" by the man in *Beyond Death's Door* (1978, pp. 103)—did not even occur according to Rawlings in *To Hell and Back*.

Furthermore, in *Beyond Death's Door*, Rawlings introduced this case of the Baptist Sunday school teacher as "one I find difficult to explain" (1978, p. 101). Rawlings described this case as follows:

This involved a staunch Christian, the founder of a Sunday school, and a lifelong supporter of the church. . . . The first episode was terrifying . . . [The teacher stated] "I am convinced it was the entrance to hell." (1978, p. 101)

Rawlings could not explain why such an apparently committed Christian should experience a "hellish" NDE, since he considers the NDE a preview of one's afterlife, in which Christians are supposed to go to heaven, not hell. According to Rawlings, the Sunday school teacher himself was also baffled by his "hellish" experience, "nor could he volunteer an explanation for its occurrence to a professing Christian" (1978, p. 103).

When this same story appears in *To Hell and Back*, however, this difficulty appears to have been resolved by a modification of the account. Instead of the teacher's impeccable Christian standing prior to the "hellish" NDE (as described in *Beyond Death's Door*), now "He said he knew he was not the Christian he should have been" (p. 76). This change in the man's story in *To Hell and Back* solves Rawlings' problem, stated in *Beyond Death's Door*, of why a "staunch" Christian had a "hellish" NDE; now the man is said to admit that he was "not the Christian he should have been."

Recall, however, that in *Beyond Death's Door* neither this man nor Rawlings could "volunteer an explanation for its occurrence to a professing Christian," since the man was clearly identified as a "staunch," professing Christian. Had there been some additional information obtained from this man about the depth of his religious convictions *after* the publication of *Beyond Death's Door* to allow for this change? Definitely not, since the man was already dead at the time of that first book's publication!

Could some previously unknown information then have been obtained from a close family member or friend after both the man's death and the publication of *Beyond Death's Door* to account for this change? This does not seem possible since the information presented in both *Beyond Death's Door* and *To Hell and Back* identifies the man himself as the source of the information. In any case, new cor-

roborative information would surely have been so identified in order not to leave Rawlings open to the charge of having adjusted his data to fit his own *a priori* conclusions. We appear to have two mutually exclusive testimonies from the (dead) man himself.

If Rawlings cannot explain how a staunch Christian can encounter a glimpse of a "hellish" afterlife, in like manner he has difficulty with a reverse scenario. How can this Sunday school teacher who in *To Hell and Back* is "not the Christian he should have been" turn around and report a "heavenly" experience following his "hellish" one? Rawlings would appear to reason that a subsequent religious conversion or deepening of his Christian commitment necessarily occurred. However, in *Beyond Death's Door*, Rawlings stated that he knew of no such transformation; thus, his "difficulty" with this case:

Without any apparent reason, *unless some secret transformation or dedication occurred of which I am unaware*, this patient's subsequent two experiences during other deaths were beautiful. (1978, pp. 101-102)

In *To Hell and Back*, the story was clearly changed and the "difficulty" eliminated:

Some sort of a conversion resulted and the second clinical death produced a wonderful, heavenly experience, the one that he wanted in the first place. . . . It appears there's nothing like a little bit of hell to dramatically change life's purpose and attitude. (p. 76, italics added)

It is important to note that Rawlings does not say "some sort of a conversion *must have resulted*." Such a selection of words would have made clear that Rawlings was interpreting or extrapolating from facts. However, Rawlings' use of the factual simple past tense "resulted" establishes it as fact, one that is now contrary to his earlier testimony in *Beyond Death's Door*. Again, this man had died prior to the publication of that first book, and thus could not have told Rawlings of this important change in his testimony.

Fourth, Rawlings' views on the NDEs reported by suicide attempters are problematic. Based on the Christian doctrine that "murder is forbidden (Sixth Commandment), including murder of oneself" (p. 115), and his assumption that the NDE is an accurate glimpse of one's afterlife destiny (that is, heaven or hell), Rawlings concludes that those who attempt suicide (self-murder) will experience a distressing or "hellish" NDE as punishment for such a forbidden act:

I have never seen any good experiences result from attempted suicide . . . All attempted self-euthanasias have been uniformly negative, not positive. This presents, I think, Ring's "invariance hypothesis" [that NDEs are similar regardless of conditions that bring one close to death] in reverse order. It backfires." (p. 111)

However, Rawlings gives no data, such as the number of NDEs from suicide attempts and descriptions of those accounts, to support his "reverse invariance hypothesis." Furthermore, by proposing such a "reverse" hypothesis, that *all* suicide-induced NDEs will be "hellish," Rawlings contradicts his own previous assertions regarding an "all or nothing" philosophy of human behavior outlined in his Preface:

We shall also emphasize the "Bell Curve" invariance of typical population studies, the curve consistently exhibiting positive events on one end and negative events on the other, neither to the exclusion of the other. We will progressively explore both positive and negative events . . . and proceed to display the same bipolar distribution . . . in many near-death experiences, particularly in the resuscitated events where the brush with death nears a biological permanency. (p. 11-12)

If the NDEs of suicide attempters indeed form a group of invariable "hellish" experiences, to contradict Rawlings' own "Bell Curve" hypothesis, then carefully collected data need to be presented. This is especially important since available data have shown that pleasant NDEs are common among survivors of suicide attempts (Greyson, 1986; Ring and Franklin, 1981-82).

Fifth, Rawlings describes the account of Sir Alfred Ayer (1988), an avowed atheist. Ayer had, according to Rawlings, a "positive or heavenly experience, bordering on ecstatic wonder," after which "it is not clear from his description if he now accepts God, the Creator, the Governor of the Universe, as the sovereign of his life" (p. 47). Ayer clearly states at the end of his article, however, that his experience had

not weakened my conviction that there is no god. I trust that my remaining an atheist will allay the anxieties of my fellow supporters in the Humanist Association. (Ayer, 1988, p. 40)

Why does Rawlings say this is "not clear"? One unfortunately is left to surmise that this fact, that an atheist after having a "heavenly" NDE remained an atheist, is not compatible with what Rawlings wants to conclude.

Sixth, Rawlings stresses the importance of separating "the generalized catch-all wastebasket of near-death experiences" (p. 58) from "unique clinical deaths" by writing:

In my opinion clinical death, our closest approach to study spiritual eternity, should be completely separated from all other NDEs, some of which do not result in any form of death. (p. 158)

When discussing the "hellish" experience, however, he appears to transgress his own methodological tenet:

It really doesn't matter whether it is clinical death, near-death, contemplated death, deathbed visions, dreams, or drugs. Indeed, there are negative experiences found in all of these. But, for some reason, no one wants to mention them. Is the hell-fire of Billy Sunday considered offensive today? (p. 85)

Rawlings adds to this confusion by freely selecting from this "generalized catch-all wastebasket of near-death experiences" to illustrate points throughout his book.

For example, let me cite two cases Rawlings presented as "hellish" cases. The first of these involved

a sixty-two-year-old man suffering an acute heart attack, [who] had to be restrained because, using his words, there were "demons coming after me." Fighting the staff, writhing and kicking off the creatures, feet running in place as if to escape, nurses and doctors pinning him to the stretcher, he eventually blacked out. After the cardiac arrest rhythm had been corrected by electric shock, the demons seemed to follow him as he went to the intensive care area where, *regaining his consciousness*, they pounced on him once again. (p. 89, italics added)

This man's experience appears to have taken place both before and after his cardiac arrest, while conscious, not during the "clinical death event" itself.

The second case "in the same week and in the same emergency room" involved

a thirty-eight-year-old heart attack victim, who, with blood-curdling screams, kept yelling he was in hell and demanding that a pastor be called. (p. 89)

No further details are given. Again, there is no indication that this patient was unconscious and physically near death at the time of his experience. (Most heart attack victims never lose consciousness or experience "near death.")

Earlier in his section on "How to Collect Cases," Rawlings warns researchers not to confuse hallucinations with NDEs. The person with a hallucination, he points out,

may see bugs, snakes, and other things [demons?] crawling across the hospital room, but note that the events occur in this world—not another world (p. 40)

Given that both of the above cases occurred while the patients were conscious and in “this world,” might they not more closely fit Rawlings’ own definition of an hallucination?

Seventh, one episode recounted by Rawlings deserves comment from a medical standpoint. Rawlings implanted a permanent pacemaker in a patient to stabilize recurrent cardiac arrhythmias. Medicare subsequently declined payment for his services since the indication for the pacemaker was not “Medicare approved.” Rawlings contested Medicare’s denial of benefits in the following manner: He arranged, with his patient’s consent, to demonstrate in front of the appeals court judge the need of his pacemaker for his survival:

Quickly placing the patient on the floor, I hooked him to the monitor and arranged the necessary magnets and paddles. I knew the patient’s heart was unable to beat on its own, but the judge had to be convinced.

Moving more papers around, the judge interrupted. “Do you intend to turn off the pacemaker?”

I shrugged, gesturing with my hands. “When I turn it off he will stop existing for a while, but that will allow your honor to determine the need for himself.” Then I started deprogramming the pacemaker.

For an eternity there was an uncanny silence and then the judge suddenly slapped the table and stood abruptly. “That won’t be necessary, doctor.” Another long pause. “After further deliberation, the court rules this pacemaker is both necessary and justified. Case dismissed!”

Like Solomon and the baby, the judge’s timely decision avoided the patient’s potential transient encounter with heaven or hell. (p. 66)

If Rawlings truly felt that his actions could have caused his patient to “stop existing for a while” and to result in a “potential transient encounter with heaven or hell,” he should have *never* considered putting his patient’s life in danger to settle a monetary dispute; nor should he have left the lay audience of his book with the clear impression, as is evident above, that it was the judge’s timely intervention, and not his own better judgment, that halted the *continuation* of this life-endangering procedure with no *medical* benefit.

If he was sure, on the other hand, that the deprogramming of the pacemaker on the floor of the courtroom was a safe and harmless procedure, then this whole episode has no relevance to his subject

of heaven, hell, and death and has been grossly misrepresented to the reader. Whichever is the case, Thomas Nelson Publishers would be well advised to delete this episode from future editions of the book.

Rawlings refers to my work (Sabom, 1982) multiple times throughout *To Hell and Back*. He openly questions the absence of "hellish" NDEs in my study and implicates me and others in a deceptive "collusion" with "Professor Ring and his previous colleagues of the IANDS group" (p. 113) to promote the belief that all NDEs are pleasant. In my sample of 78 NDEs from 116 near-death survivors, however, I did *not* encounter a "hellish" NDE nor participate in any collusion to deny its existence. Since publication of my book 14 years ago, I have encountered a few distressing NDEs, which I will include in future publications. Moreover, others within IANDS have reported cases and analyses of distressing NDEs (Greyson and Bush, 1992). From these initial reports, this kind of NDE appears to be a rare but real phenomenon.

How rare is the distressing NDE? The largest series to date contains 50 accounts collected over a ten-year period (Greyson and Bush, 1992). This number contrasts with literally thousands of pleasant NDEs reported over this same decade. Furthermore, a nationwide poll conducted in 1980-81 by the Gallup Organization (Gallup and Proctor, 1982) found that 1 percent of near-death experiencers report predominantly distressing NDEs.

Are the great bulk of distressing NDEs repressed and thus not reported? One study suggested that this is not so: Charles Garfield (1979) interviewed 36 individuals from 2 hours to 3 days after the event and found that with serial interviewing over the ensuing 3-week period, no change occurred in the description (or repression) of either the pleasant or distressing NDEs. Furthermore, elapsed time since the NDE has been shown not to convert the unpleasant to the pleasant in recollection of NDEs (as Rawlings implied) and, in fact, may actually reduce the pleasantness of the recollection (Greyson, 1983). Thus Rawlings' contention that these "hellish" NDEs frequently occur but are quickly repressed or altered is an interesting hypothesis without evidence to date.

Rawlings is correct in pointing out that most of my interviews with near-death survivors (Sabom, 1982) were conducted after their initial recovery from the near-death crisis event. Sarah Kreutziger, the psychiatric social worker who assisted me in this study, and I were both concerned at the time with possible adverse effects of immediate post-resuscitation interviewing on our patient's recovery. We considered

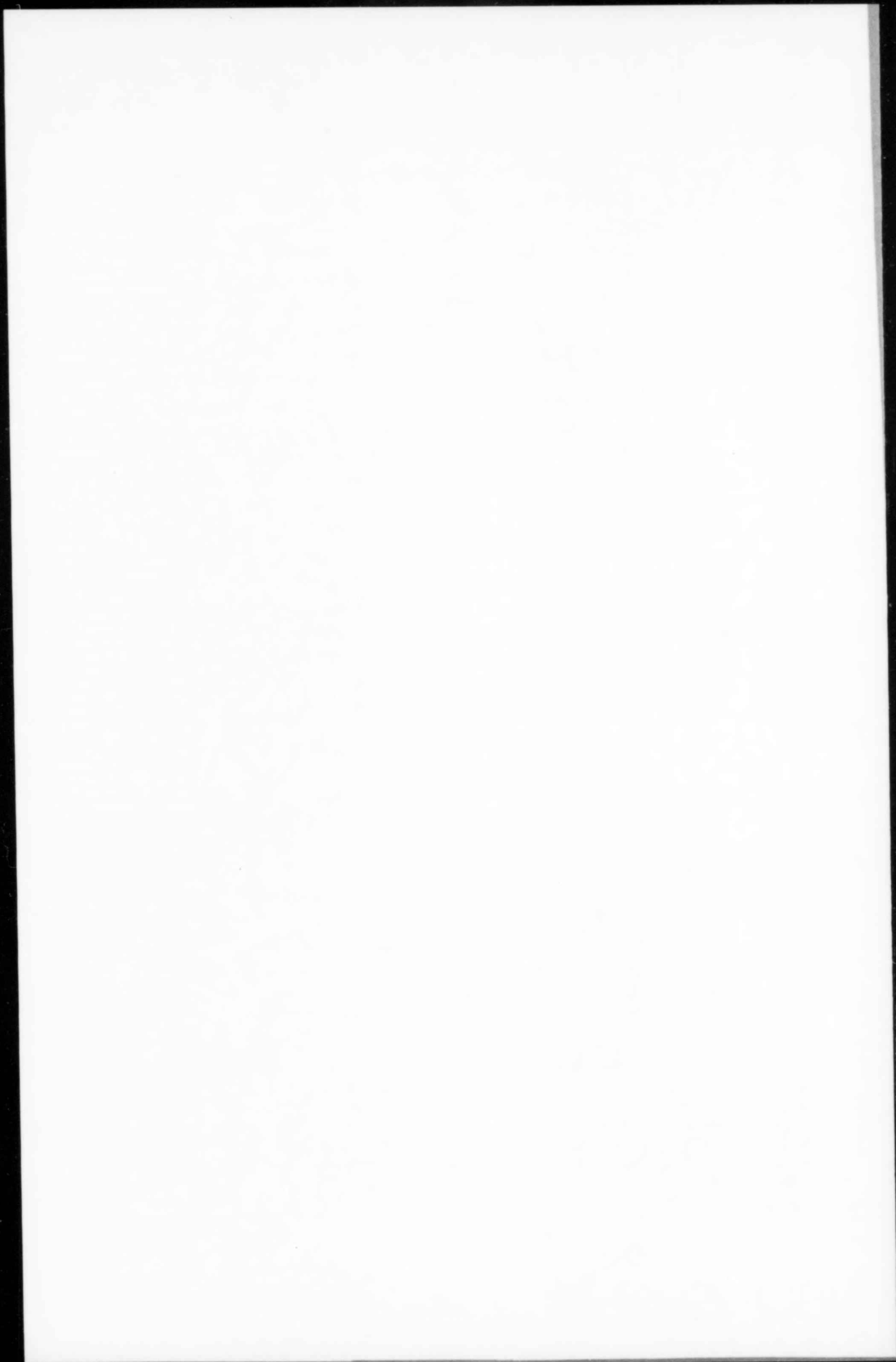
these interviews as research interventions to be carefully undertaken only after the patient had been safely stabilized.

In closing, Rawlings' approach in *To Hell and Back* appears to be as follows: He establishes himself before his audience as a cardiologist with impeccable credentials, a near-death researcher, and a committed Christian. Using these medical, scientific, and religious qualifications, he then presents the NDE as a glimpse of an afterlife and directly applies the Christian doctrine of heaven and hell to these experiences. This gridlike approach, however, poses problems to Rawlings in his interpretation of his and others' research when the type of person (for example, non-Christian) or type of near-death event (for example, suicide attempt) does not jibe with the expected afterlife destination (for example, hell). Rawlings confronts the data of others with authoritative statements substantiated with little or no data of his own and illustrated with anecdotal accounts that, over time, appear to have been altered to fit his own designs. I have given Rawlings a copy of this commentary for an opportunity to respond.

I am a Christian and believe in heaven and hell. Based on current knowledge, however, we have much to learn about the NDE, both distressing and pleasant, before we can say confidently just what this experience means and how it fits into our spiritual beliefs.

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BOOK REVIEW

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Near-Death Experiences in Antiquity, by Jenó Platthy. Santa Claus, IN: Federation of International Poetry Associations of UNESCO, 1992. 159 pp, \$28.00 pb.

Jeno Platthy, the Executive Director of the Federation of International Poetry Associations of UNESCO, he has written 27 poetry volumes and 22 prose nonfiction works, six of them in Japanese. Their content ranges from the effect of the 1956 Hungarian uprising on Asian nations to critical biographies of Plato, Ch'u Yuan, and Béla Bartók. In *Near-Death Experiences in Antiquity*, this prolific and multifaceted author provides his own English translations of individual passages from ancient authors describing the phenomena we now call near-death experiences (NDEs), as well as references highlighting the role of the soul in ancient thought and the definition and use of that term in ancient NDE accounts.

Platthy includes in this book mythological parallels and literary accounts as well as historical cases. He argues that neither modern near-death research nor medieval accounts of otherworld journeys as researched by Carol Zaleski (1987) are understandable without the perspective of this earlier literature. The soul's torture after death, for example, a common theme of medieval Christian apologists, was presaged by Pythagoras's account of his own visit to Hades.

Platthy retells the stories of 25 mythological visitors to the Underworld, in most cases summarizing and integrating several divergent accounts of each myth. Some of these stories are quite familiar to most Westerners through various dramatic recountings over the

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past 2000 years; he devotes, for example, 18 pages to the story of Orpheus's journey to Hades. Many of these stories, however, are virtually unknown accounts drawn from obscure sources.

Platthy devotes 6 pages to a retelling of Plato's mythological account of Er and another 18 pages to a commentary on this famous NDE, which Raymond Moody (1975) included in the first book on NDEs. In fact, it was Platthy's encounter with the story of Er, while he was researching his biography of Plato, that sparked his interest in classical near-death visions. Platthy's intriguing commentary traces Oriental influences on Plato's account of Er, particularly the Zoroastrian parallels. He devotes another 10 pages to Plutarch's account, thought to be historical rather than mythological, of the near-death visions of Thespesius and of Timarchus.

Some of these ancient NDE accounts are quite remarkable. Platthy relates the case, recorded by Proclus, of Cleonymus of Athens, who in his NDE encountered Lysias of Syracuse, also having an NDE. After their recovery, Lysias happened to visit Athens, whereupon Cleonymus recognized him from their shared near-death vision. Platthy includes another case, recorded by Aristotle, of a Greek king who returned from his NDE making many accurate predictions about an earthquake, a flood, and the lifespans of his acquaintances.

Platthy also relates two striking accounts recorded by Pliny. In the first on these, Hermotimus of Clazomenae repeatedly left his body to roam abroad and upon returning accurately described events occurring in distant lands. In the second, Corfidius had a veridical "Peak in Darien" vision in his NDE: Corfidius not only encountered in his NDE his deceased brother *before anyone knew that his brother had passed away*, but also returned with accurate information as to where that brother had secretly buried some gold. One culture-bound feature characteristic of these ancient Greek accounts, rarely seen in contemporary NDEs, is that experiencers were usually "selected to undergo" the experience and return to the living as "messengers."

Platthy tells us that Plutarch, himself a priest at Delphi, saw the Eleusinian mystery as a death rehearsal, a theme echoed by Kenneth Ring (1984, 1987) and Michael Grosso (1984). Platthy's description of the afterlife journey—or of the Eleusinian rite—parallels the bardo sequence of the *Tibetan Book of the Dead* (Evans-Wentz, 1957): "loitering" and aimless wandering; traversing the darkness; facing terrors, amazed by fright; then encountering a marvelous light and meadows; followed by initiation and conversation with pure wise men. Platthy himself describes the purpose of the Greek mystery

rites as cleansing the soul of its accretions, which needs to be done periodically, much as one needs to change the oil in one's car from time to time.

Platthy's discussion of these ancient Greek NDEs explores both later Western parallels and Eastern influences from China, India, and Egypt. He provides an extensive exegesis of the "daimon" that serves as a guide to the individual soul on its otherworld journey. In a final section on skeptics, he summarizes science's problem with the concept of the soul: he notes that scientists expect to exert control over whatever they study, and consequently are apt to deny the existence of things like souls over which they can't exercise control. He alludes to modern scientific studies of weight loss at the point of death, but argues ultimately that the NDE and its aftereffects are in themselves *prima facie* evidence of survival.

Many of Platthy's conclusions will be congenial to NDErs: for example, that it is easy to slip back to life from death once the secret is known, and that that secret is love; and that reality is much wider and infinitely more complex than experiences on earth would lead us to believe. He notes that we can have no rational proof of the immortality of the soul because the door to the otherworld does not open through logic or rational senses, but rather through parables, mythical tales, and visions, which, while they may be enlightening, cannot provide rational evidence of anything. Platthy notes that the older texts support postmortem survival not of the individual personality, but only of the soul that partakes in, and becomes identical with, divinity.

Platthy argues that modern near-death research is not fully understandable without comprehension of its classical roots. For those interested in pursuing those roots—and Platthy argues that that should include all of us—this book is a definitive encyclopedic resource. This is an extremely impressive collection of NDEs from the ancient literature, and Platthy has comprehensively documented various primary sources and secondary annotations and interpretations. The text is laden not only with classical references, but also with scholarly etymological asides that form the basis of many of Platthy's conclusions and speculations.

This is not an easy book to read, however; I found many of the references abstruse and some of Platthy's arguments quite intricate, often assuming the considerable familiarity with classical sources. Furthermore, English not being Platthy's native tongue, he occasionally uses the wrong word (for example, *deduct* when he means *de-*

duce), and his syntax is at times unnecessarily convoluted, as illustrated in his explanation of the relationship of the soul to its individual daimon (p. 117):

The finite number of souls (*Rep.* X 611 A, *Laws* X 904 AB), especially each soul with the daimon, that is a finite number of souls with a finite number of daimons in comparison with forms or 'ideas,' that is classes of things, related to the daimons in a way, posed the problem of participation (*methexis*) which, in Aristotle's words, only changed the name of the Pythagorean representation of numbers by which things exist, into participation (*Arist. Metaph.* VI 987b 9 sqq.).

Classical scholars, however, will find this a treasure trove of near-death references. In addition to the ancient sources referenced in the text and tabulated in a 7-page index, Platthy includes a bibliography of 91 more recent texts, almost all of which will be new to most readers of this Journal.

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Letters to the Editor

More on Kenneth Ring's "Swan Song"

To the Editor:

I have read with amusement the banter between Kenneth Ring and various correspondents concerning his supposed retirement from research. Ring's impact on the field of near-death studies precludes and transcends any retirement on his part. His work continues to inspire and challenge virtually everyone in the field, from Buddhist parapsychologist Susan Blackmore to mainstream medical scientists such as German psychiatrist Michael Schroeter-Kunhardt or myself, to reductionistic psychoanalysts such as Russell Noyes or Stuart Twemlow. Few articles on near-death experiences do not reference his work. Virtually every month I receive a phone call from a graduate student stating, "I am working on a research project and Dr. Ring suggested I call you."

In contrast to Vincent Luciani, I would be intensely interested in any book written by Ring. I have read *The Omega Project* (Ring, 1992) three times and have learned something each time. The insights I gained from reading that book have served as the basis for most of my own theoretical insights into death-related visions and their implications for consciousness research. Once we recognize that dying experiences are only one element of a wide range of healthy and unhealthy mental dissociative processes, we suddenly understand the links between dying experiences and the experiences of those in spiritual crises as diverse as child abuse or multiple personality disorder. This insight is one of the most powerful understandings useful in helping healthcare professionals to use spiritual visions to empower the dying and heal the grief of the living.

Luciani (1995) has challenged me to report conclusive evidence in support of his contention that every person who has survived a near-death experience receives a spiritual mandate of some sort. I sympathize with his desire to control the outcome of scientific studies and produce conclusions that conform to his world view. Unfortunately, near-death studies are clearly paradigm-shattering and challenge our preconceived spiritual and intellectual world views. The

implication of Luciani's challenge is anti-intellectual. It is the same line of thinking that has led people such as Paul Kurtz, a well-known materialist, to publish in their own vanity presses research supporting their own views. We must reject that comfortable pathway and engage in the intellectual bloodletting necessary for revolutionary scientific thought.

No one has been more critical of Ring than I have. In my own recent review of death-related visions I stated: "His interview format is filled with leading questions . . . heavily weighted toward answers which would please the interviewer by disclosing mystical events and personality transformations. The book is filled with impressive statistics based on a biased subject sample and poor data collection techniques" (Morse, 1994, p. 60). My own mother had to intervene to keep me from writing even more critical comments. Lest anyone think that I spared myself in this review, I pointed out that my own \$100,000 two-year attempt to document the transformations associated with near-death experiences was dismissed by Robert Kastenbaum as "campfire stories" (Kastenbaum, 1993, cited in Morse, 1994, p. 61).

Healthy criticism is the lifeblood of science; refusing to consider studies that conflict with one's world view is not. Of course, researchers want to please the public who buy their books, so Luciani's threat to not read books that he does not agree with is a powerful economic statement. If it is for these economic and political reasons that a well-designed study from Australia that found no transformative effects attributable to near-death experiences remains unpublished.

Ring's contributions cannot be measured by how many books he sells. He is one of my personal heroes, a man who has profoundly affected by own research. Every time a grieving parent thanks me for the insights he or she has gained from reading my books, I know that thanks also go to Ring and many others, researchers I often disagree with. I do not feel it is at all controversial to assert boldly that practical advances in fields as diverse as cancer treatment, parapsychology, healthcare reform, psychiatry, consciousness research, computer science, and the treatment of grief will come from understanding near-death experiences. Near-death studies are too important to be stifled by politically correct thought police.

I issue my own challenge to anyone who writes books not accepted by the near-death establishment—the Maurice Rawlingses, the Blackmores, and, yes, sometimes even an establishment figure such as Ring: for every copy of your books that Luciani and those who agree with him don't buy, I will buy ten.

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NDEs and Satisfaction with Life

To the Editor:

I read with great interest Bruce Greyson's paper (1994) on near-death experiences (NDEs) and satisfaction with life, a very needed research area. He wrote that the results—that NDErs were equally as satisfied with life as were nonexperiencers—were counterintuitive. Indeed they were, and I am not sure his explanations clarified all that made them so. I never believed that NDErs were messianic figures who would turn the world on the right track, as they are portrayed by some; but I expected something positive on the whole.

Could a bias in Greyson's sampling have contributed to the negative results? In my review (1994) of Kenneth Ring's book *The Omega Project* (1992), in which he sampled subjects from the membership of the International Association for Near-Death Studies (IANDS), I pointed out how unrepresentative that group is of the American population. Greyson's study also may be slanted by IANDS' unrepresentativeness. Maybe a new sample of unselected subjects, a sample referred by friendly physicians and nurses, would help clarify this point.

Let me emphasize that Greyson has put his finger on the right spot: we badly need clear insights into this area of research. I am just suggesting a little more.

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Bruce Greyson Responds

To the Editor:

I appreciate Karlis Osis' interest in NDErs' satisfaction with life, and his insights into possible sampling bias in my work. Osis, a pioneer in the research of out-of-body experiences and deathbed visions, questioned whether the similar ratings of my three study groups—NDErs, individuals who had some close to death without NDEs, and individuals who had never come close to death—might have been due to their all having been drawn from the IANDS membership, who may not be representative of other NDErs or the general population. The fact that my findings replicated those of Melodie Olson and Peggy Dulaney's study (1993) of an unselected sample of elderly NDErs and nonNDErs makes it somewhat less plausible that they were due solely to sampling bias. Nevertheless, Osis' point is valid that the IANDS membership may be so homogeneous in certain attitudes as to obscure differences between NDErs and nonNDErs that would be obvious among non-IANDS members.

Another possible explanation for my negative results has recently been brought to my attention. Bill Bingham (personal communication, November 3, 1994), coordinator of the Houston chapter of the Friends of IANDS, suggested that in assessing their satisfaction with life, NDErs and nonNDErs may judge their current situation by very different yardsticks. NonNDErs compare their current existence to an idealized earthly life that may differ from their current life only

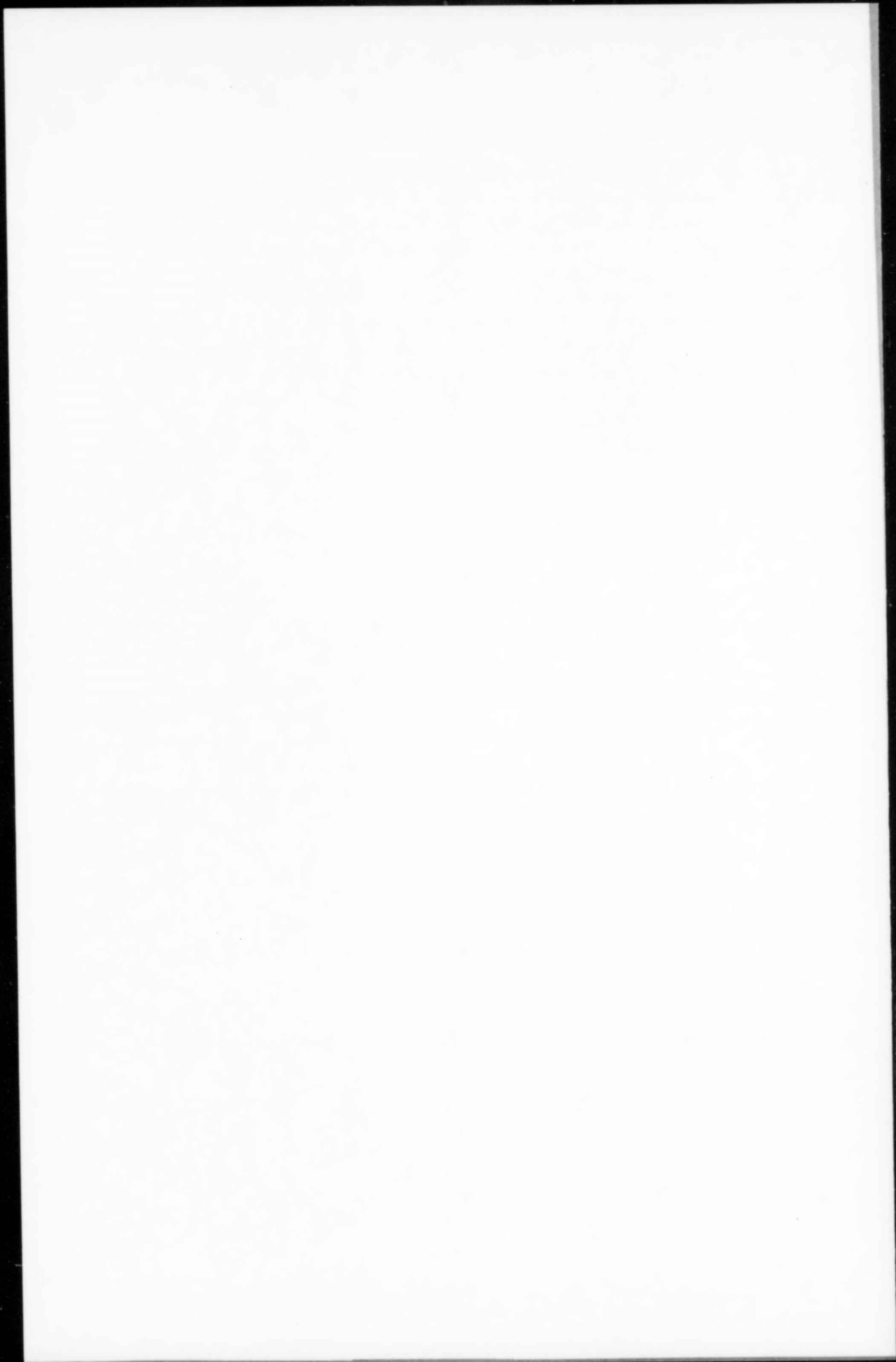
in small details. NDErs, on the other hand, compare their current existence to the transcendent realm of the NDE; by that criterion, Bingham suggested, few NDErs would say they were "satisfied" with life. While the wording of the Satisfaction With Life Scale implied a comparison with "what might have been" in this earthly realm, the contrast to the unearthly dimension could certainly have influenced NDErs' ratings. In the interest of using a scale that had documented reliability and validity, I may have selected one that might be insensitive to NDErs' particular viewpoint, and that may well have contributed to my failure to find a difference between groups.

Osis' and Bingham's comments, taken together, point out the need for a more definitive study of randomly selected NDErs and control groups in which criteria for judging life satisfaction are spelled out more clearly.

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INSTRUCTIONS TO AUTHORS

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GENERAL REQUIREMENTS: Logical organization is essential. While headings help to structure the content, titles and headings within the manuscript should be as short as possible. Do not use the generic masculine pronoun or other sexist terminology.

MANUSCRIPTS should be submitted in triplicate, typed on one side of the page only, and double spaced throughout. A margin of at least one inch should be left on all four edges. Except under unusual circumstances, manuscripts should not exceed 20, 8 1/2 x 11" white pages. Send manuscripts to: Bruce Greyson, M.D., Division of Personality Studies, Department of Psychiatric Medicine, Box 152, University of Virginia Health Sciences Center, Charlottesville, VA 22908.

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REFERENCES should be listed on a separate page and referred to in the text by author(s) and year of publication in accordance with the style described in the Publication Manual of the American Psychological Association, 3rd Edition, 1983. Only items cited in manuscripts should be listed as references. Page numbers must be provided for direct quotations.

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