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THE 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 experiences 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, Department of Psychiatry, University of Connecticut Health Center, Farmington, CT 06032.

MANUSCRIPTS should be submitted in triplicate to Bruce Greyson, M.D., Department of Psychiatry, University of Connecticut Health Center, Farmington, CT 06032. See inside back cover for style requirements.

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Editor’s Foreword

I open this issue of the Journal with an editorial based on my keynote address to the IANDS Conference at Rosemont College in June 1989, on whether our modern science can, and should, explain near-death phenomena.

This issue also contains two empirical studies. Sociologist Cherie Sutherland explores the incidence of psychic phenomena and related beliefs in an Australian sample of near-death experiencers; and health educators Barbara Walker and Robert Russell report on a survey of psychologists' knowledge of, and attitudes toward, near-death experiences, using the knowledge-and-attitudes scale nursing professor Nina Thornburg described in this Journal last year.

The issue concludes with social psychologist Kenneth Ring’s review of parapsychologist Scott Rogo’s comprehensive survey of near-death research, *Return From Silence*; and with letters to the editor from V. Krishnan in response to John White’s Guest Editorial of last year on consciousness and substance as primal forms of God, and by health scientist William Serdahely on the concept of a collective near-death experience of an entire culture.

*Bruce Greyson, M.D.*
Editorial: Can Science Explain the Near-Death Experience?

Bruce Greyson, M.D.
University of Connecticut

ABSTRACT: Science is a tool for answering empirical questions; it is not designed to address ontological or teleological issues such as the ultimate reality and meaning of the near-death experience (NDE). There are, however, a number of empirical questions about NDEs that can be explored by the scientific method. Scientific study poses risks both to NDErs and to our understanding of the NDE itself. However, because the NDE allows us unique access to information about consciousness and death, those risks are outweighed by the benefits to NDErs and to humanity derived from a scientific description of NDErs.

As a scientist, both by training and by temperament, I find myself in a rather strange situation, albeit one of my own making. I have spent much of my creative energy and time over the past 15 years studying the near-death experience, a phenomenon that can hardly be put into words, let alone examined under a microscope. Fortunately, I am not alone in the scientific pursuit of something that seems paradoxically immune to scientific inquiry. In fact, considering the lack of respect and funding for such research, there is a surprisingly large community of scholars united in this pursuit.

Dr Greyson is Associate Professor of Psychiatry at the University of Connecticut School of Medicine. This paper is an abridged version of his keynote lecture presented at the International Association for Near-Death Studies First Annual Conference, Rosemont, PA, June 1989. Requests for reprints should be addressed to Dr. Greyson at the Department of Psychiatry, University of Connecticut Health Center, Farmington, CT 06032.
I will not dwell on why a scientist finds phenomena like near-death experiences (NDEs) interesting. Quite a lot has been written lately about why NDEs fascinate us, in this Journal and elsewhere; what much of it boils down to is that scientists, like other people, want to know what life is all about, what death is all about, what we are all about, what God is all about, what the universe is all about. And the NDE, a manifestation of consciousness at the interface between life and death, promises answers to those riddles.

Instead, I'd like to address two more critical questions central to scientific near-death research. The first is the title of this paper: Can science explain NDEs? The second is very different but equally important question: Should science explain NDEs?

What is Science?

Let me start by addressing what we mean by "science"—not a simple matter. Isaac Asimov has written a highly literate summary of the historical progression of science from mythology to deductive logic to inductive reasoning (Asimov, 1972). I'm going to elaborate briefly on that progression in order to spell out the implications for scientific near-death research of why science developed as it did, and why it needs to keep evolving further.

Mankind has always sought answers to questions. Some of these are practical questions, such as "What plants are good to eat?" It's fairly easy to see the value of seeking answers to that kind of question. But we've also sought answers to abstract questions such as "Why is the sky blue?" It's not quite so obvious why we keep asking questions like this, but whatever our reasons, it seems as though seeking answers is an integral part of being human. At first our answers were intuitive or spontaneous. Depending on your perspective, they were either made up by the creative imagination or derived from supernatural inspiration or divine revelation; but they had no grounding in either logic or empirical observation.

For example, according to an ancient Greek myth, cold weather lasts six months each year because Persephone ate six pomegranate seeds while she was in Hades; according to a Wyandot Indian myth, leaves turn red each autumn because the Bear's blood drips down on them from the heavens where he was gored by the Deer's antlers. Imagination or revelation may have produced answers that were psychologically satisfying, but they didn't allow us to predict new information or new answers based on what we already knew.
The Greeks changed all that for Western civilization. To myth-makers, the gods and spirits who controlled the universe were as fickle as people. The Greek philosophers were the first to conceive of the universe as a machine governed by constant, impersonal laws. With this world view, instead of being at the mercy of the gods, we could now decipher the laws of nature and predict the course of events.

In trying to discover the laws of the universe, the Greek philosophers assumed that those laws are in fact constant, and also understandable. They assumed that there was an ideal, perfect, and orderly universe, and that if we could discover its rules we could predict every action.

The tool the Greeks developed for discovering the laws of nature was deductive reasoning. Starting with what seemed to be obvious truths, like "the shortest distance between two points is a straight line," certain consequences must follow logically. For example, we start with the absolute truths that all men are animals and that all animals must eat to live, and from those two truths, we logically deduce that all men must eat to live.

Deduction is a wonderful tool for mathematics, and with it the Greeks developed the geometry that we still use today. But because of that success, they came to regard deduction as the only acceptable way to learn about the universe. And before too long, that attitude led to serious problems.

First, there are some pieces of information that can't be deduced from abstract principles. For example, you can't deduce the number of readers of this Journal from basic truths; they have to be counted, or observed in some way. The Greek system of deductive logic recognized pure mental reasoning from the basic truths as the only source of new information; it did not respect empirical observations, which can be wrong, since they are based on our imperfect senses and not on the absolute truths. For example, if we observed that a certain man could survive without food, the Greek philosophers would say that our observation must be wrong, because it contradicts the logical deduction.

The second problem with deduction from basic truths is that, as you get further afield from geometry, it gets less clear what those basic truths are. In astronomy, the Greeks started with basic absolutes such as "all heavenly bodies orbit around the earth in perfect circles," and proceeded to reason deductively from there.

When accurate astronomical observations, such as the timing of eclipses, disagreed with logical deductions, the observations had to be thrown out, because the basic truths and the rules of logic were perfect, while our instruments and senses are subject to all kinds of error. So, while logical deduction allowed us to predict new information and new
answers based on known truths, it was limited in the types of questions it could answer, and if the basic assumptions were wrong, then the answers too would be wrong, despite the perfect method.

Only in the last 400 years have we started valuing our senses as a source of scientific truth. Renaissance scientists turned the Greek philosophers' deductive logic upside down and developed a new logic called induction. Instead of assuming basic truths and then deriving conclusions from those truths, induction starts with making observations and then derives generalizations or basic truths from those observations.

For example, we start with the observations that if fish don't get food, they die; and that if birds don't get food, they die; and that if dogs don't get food, then they die; and we induce from these observations the generalization that all animals must eat to live. For the first time, then, we sought new information by conducting experiments, that is, making observations.

The Greeks' deductive scientific method assumed that there was a perfect, ideal world; our physical world was merely an imperfect approximation of that reality. The new inductive scientific method, on the other hand, assumed that our physical world was the real world; and our generalizations are merely imperfect approximations of the truth. Deductive reasoning must be related to a few basic truths, and is therefore limited in scope. Inductive reasoning, on the other hand, can expand forever, as we expand our observations of the physical world.

In making the leap from deductive logic to inductive logic, science has had to abandon the idea of an ultimate truth. No matter how many observations seem to support a given generalization, we can never consider it absolutely valid, for the next observation may contradict it. For example, if we observe that a certain animal can survive without food, then the inductive scientist would throw out the generalization that all animals must eat to live.

Absolute certainty cannot exist in our modern inductive science. And in fact, as we become more sophisticated in our observations, we regularly throw away generalizations that used to be regarded as true. Inductive reasoning from newer and more valid observations continues to yield newer and more valid generalizations.

For example, 400 years ago astronomers demonstrated that planets move in elliptical orbits around the sun, and we discarded the generalization that all orbits are round. In this century, physicists observed that near the speed of light objects get shorter and heavier, and we discarded the generalization that space and time are absolute.
But just as the imagination or inspiration of the mythmakers and the deductive logic of the Greeks had their limitations, so too does our modern scientific method. If we make the mistake of regarding inductive science as the only valid source of new information and new answers, we run into the same two problems as the Greek philosophers. Just as some of their basic assumptions turned out to be wrong, so too many of our basic empirical observations are going to be wrong. The difference is that we know in advance that our senses and instruments and measuring devices are imperfect, so we shouldn't make that mistake.

And just as the Greeks' deductive logic was limited to answering certain kinds of questions, so too our modern science based on observation can only answer questions about things that can be observed. Again, unlike the Greeks, who thought there were basic truths about everything, from which they could deduce conclusions, we know in advance that some things simply can't be observed, and therefore cannot be subjected to scientific analysis.

Science then has proven to be a very practical way of answering certain kinds of questions, but it can hardly answer all our questions. As Oliver Wendell Holmes put it a century ago: "Science is a first-rate piece of furniture of a man's upper chamber, if he has common sense on the ground floor" (Holmes, 1968, Sect. V).

So with that background, let me return to the question: Can science explain near-death experiences? If the inductive method that we know as today's science is a tool for studying observable events and building generalized rules from those observations, the question "Can science explain NDEs?" becomes "Is the NDE observable?"

The NDE itself, obviously, is not something that onlookers can watch or measure. And many of what seem to be the important questions about NDEs, like "What do they mean?" or "What is the nature of the reality in the NDE?", are not observable and therefore not appropriate questions for science. The scientific method answers "how" questions, but not "why" questions. We can't expect science to address the philosophical questions about NDEs, but only the empirical questions about them.

Are there empirical questions worth asking about NDEs? I maintain that there are, and I believe that in answering some of these empirical questions about NDEs, we can refine what we think we know about the experience and clarify how we regard these events, so that it may become much easier to address the philosophical questions by other means.
The first point to make in exploring a scientific or empirical approach to NDEs is, if we can’t observe the NDE itself, what can we observe? We can certainly observe the reports of what near-death experiencers, or NDErs, remember of the experiences. Of course, what they remember may not be the same as what they actually experienced, and what they choose to tell a researcher may not be the same as what they remember. In addition to what they say, we can also observe how NDErs act. So the question "Can science explain NDEs?" now becomes "Can science explain what people say and do after an NDE?"

What are those empirical questions about NDEs that are worth asking? What can scientific research tell us about NDEs? There are a number of general categories of empirical questions about NDEs; for example: (1) What do NDEs consist of? (2) What influences who will have an NDE? (3) What are the aftereffects of NDEs? (4) What practical applications do NDEs have? (5) How are NDEs similar to or different from other experiences? and (6) How reliable are NDE reports?

A number of scientific studies have been conducted in an attempt to answer these questions. The first category of empirical question I mentioned was "What do NDEs consist of?" When your restate this question in operational terms, it becomes "What do NDErs report the NDEs to consist of?" Within that general category, there are a number of issues that science can address. The first is: Can NDEs be broken down into a few meaningful components or parts?

When I first began this work 15 years ago, I read what had been written up to that point by the early pioneers of near-death research, such as psychiatrists Raymond Moody and Russell Noyes and parapsychologist Karlis Osis. I collected from that early literature more than a hundred different features—feelings, sensations, encounters, and events—that had been reported as part of an NDE. Through a process of collecting reports from hundreds of NDErs and refining those reports through statistical techniques, which are just another type of observational instrument, I was able to describe the NDE as containing four separate parts (Greyson, 1983b).

I labeled these four component parts: (1) a Cognitive Component, including time distortion, thought acceleration, life review, and sudden understanding; (2) an Affective Component, including feelings of peace, joy, and cosmic unity, and an experience of a brilliant light; (3) a Paranormal Component, including enhanced vision or hearing, apparent extrasensory perception, precognitive vision, and an out-of-body experience; and (4) a Transcendental Component, including encounters with an apparently unearthly realm, a mystical being, and visible
spirits and a barrier or "point of no return" that, had the NDEr crossed it, would have precluded his or her return to life.

Obviously, not all NDEs include all of these features, but all NDEs can be described as having so many Cognitive elements, so many Affective elements, so many Paranormal elements, and so many Transcendental elements. Furthermore, each individual NDE can be classified as to whether it is predominantly a Cognitive, Affective, or Transcendental experience. (As it turns out, almost no NDEs are predominantly Paranormal.) The importance of this is that when we compare NDE reports with physiological and psychological variables, we can look at these distinct parts separately (Greyson, 1985).

Another question about what NDEs consist of is: Do the different parts of an NDE unfold simultaneously, or in some temporal sequence? Psychologist Kenneth Ring formulated a model of the NDE unfolding in five sequential stages: peace, separation from the body, the tunnel, seeing the light, and entering the light (Ring, 1980). Looking at the NDE in temporal stages is quite different from looking at separate parts of the NDE. Which way of looking at the experience is right?

Again, the leap to a science based on induction meant giving up the idea that any of our conclusions represents an absolute truth. From the observations—what NDErs tell us—we build generalizations that are imperfect models of the way things are. There is no meaning to the question of which model is the right one, since they aren't intended to be truths. The only meaningful question is how helpful these models are in predicting new information and new answers. Temporal stage models can predict some new information, and component models can predict other information.

As an analogy, consider our scientific models for understanding the behavior of light. One model that pictures light as a particle, or photon, predicts some events, like the casting of shadows. Another model that pictures light as a wave predicts other events, like the diffraction of white sunlight into multicolored rainbows. The photon model doesn't predict rainbows, and the lighwave model doesn't predict shadows, so science regards both models as incomplete.

Instead, the scientist searches for more comprehensive models: for example, a model that pictures light as being sometimes a wave and sometimes a particle, or a model that pictures light as "wavicle," with some properties of waves and some properties of particles. But until we develop a more useful single model, we're left with multiple models of light, each of which is useful for predicting different phenomena about light.

The same may be true for NDEs. Perhaps a temporal stages model...
will be more helpful in predicting some features of NDEs, and a parallel components model more helpful in predicting others. But inductive science views all models as just models, rough approximations of reality that are never right or wrong, but only approximations that are closer or farther from the truth.

We can also ask empirical questions about different parts of the NDE, about different kinds of NDEs, and about NDEs in different people. For example: What paranormal or mystical elements occur in NDEs? How do unpleasant, negative, or hellish NDEs differ from others? How do NDEs vary among different cultures? Cross-cultural studies have tended to support the similarity of the basic near-death experience across a wide range of societies, but such studies are few in number and generally have included too few cases to provide definitive comparisons.

Within our own culture, we can ask how NDEs differ among different segments of the population. Larger studies of NDEs, such as those of Ring (1980, 1984) and cardiologist Michael Sabom (1982), categorizing subjects by age, sex, race, religious and educational background, have never shown any effect of these variables on either the frequency with which people report NDEs or on the type of experiences they report.

The second category of empirical question I alluded to above was "What influences who will have an NDE?" To answer these questions, we need not only a group of near-death experiencers, but a "control group" of people who have not had NDEs. For my research, I anticipated a control group of people who came close to death but did not report NDEs. In the process of recruiting such a control group, I unexpectedly came across two further groups of subjects.

The first unanticipated group consisted of those who claimed to have had NDEs, but whose descriptions of what they experienced scored close to zero on an instrument like my NDE Scale. Did those people have NDEs, or didn't they? Something happened to these people that made them label their experiences as NDEs, but in the interest of research I kept them in a separate group.

The second unanticipated group consisted of those who denied having had an NDE, but whose descriptions of what did happen when they came close to death scored quite high on the NDE Scale. Did these people have NDEs, or didn't they? Despite their experiencing many of the common features of NDEs, something prevented them from labeling their experiences as NDEs. Again, in the interest of research, I have kept these people in a separate group.

How NDErs compare with the control subjects on a variety of variables can then tell us what factors influence who will have an NDE,
and, by looking at the separate parts of the NDE, can tell us what factors will determine who will have what kind of an NDE. Furthermore, including in the analysis my two unanticipated groups of ambiguous NDErs can tell us what factors will determine who will label an experience as having been an NDE and who will be reluctant to do so.

Several factors that might potentially influence the NDE can be observed. We can ask, for example: What sociocultural variables influence the NDE? How do religious beliefs and practices influence the NDE? As I mentioned above, none of the larger studies of near-death experiences so far have shown any effect of these variables. We can also ask how previous paranormal or mystical experiences might influence the NDE. My own research has found that such experiences are no more or less common in NDErs before the NDE than they are in the general population (Greyson, 1983a).

We can also ask: How do prior expectations of death and dying influence the NDE? Again, research that I carried out with psychiatrist Ian Stevenson showed no effect of prior expectations of death or an afterlife, and no effect of prior knowledge about NDEs (Greyson and Stevenson, 1980). And how do circumstances of the close brush with death influence the NDE? No particular way of approaching death has yet been shown to lead to any particular type of NDE. However, it does seem to matter whether a close brush with death was sudden and unexpected, such as in many accidents and heart attacks, or whether it was possibly anticipated, such as in suicide attempts or complications of surgery.

My research has shown that sudden, unexpected near-death events lead to roughly equal numbers of Cognitive, Affective, and Transcendental experiences. However, Cognitive NDEs—where time distortion, thought acceleration, life review, and sudden understanding are more prominent—tend not to occur in people who had expected to die and had had time to prepare for it (Greyson, 1985). While I hadn't anticipated that finding, it makes sense: you're more likely to survive a sudden unexpected accident if you stop time, think faster than usual, and acquire sudden insights. On the other hand, people who expect they may die soon often review their lives in preparation for death, so that a life review during the near-death event becomes unnecessary.

We can also ask how physical details of the close brush with death influence the NDE. What effect does brain functioning have, as measured by EEGs? Though a number of writers have reported anecdotes about NDErs who recovered from "flat EEGs," no physician or scientist has yet published a firsthand report with EEG findings. What is the effect of level of consciousness? My own research has suggested that
the occurrence of NDEs in a near-death situation is not related to alteration or loss of consciousness (Greyson, 1981).

We can ask more specific questions, such as: How does anoxia, as measured by blood levels of oxygen, influence the NDE? Though skeptics often attribute NDEs to anoxia, Sabom, who alone has reported actual levels of blood gases, in NDErs, found no effect of anoxia (Sabom, 1982). How do endorphins, morphine-like compounds produced in the body under stress, influence the NDE? Again, endorphins are widely implicated in theories of NDEs, but they are extremely difficult to measure directly. However, in some emergency settings comatose patients are given narcotic antagonists, which would block the effect of endorphins. By studying the incidence and type of NDEs in people who have been given these drugs while close to death, we might infer the role of endorphins in NDEs.

The questions we can ask about the effects of drugs on the NDE are limited only by the number of different drugs available, but we can ask generally: Do drugs seem to influence the occurrence or type of NDE? Once again, while a number of drugs can produce states that have features in common with NDEs, studies of near-death experiencers by Sabom (1982), by Karlis Osis and Erlandur Haraldsson (Osis and Haraldsson, 1977), and by myself (Greyson, 1981) have concluded that NDEs occur less often when people near death are given drugs.

Perhaps the ultimate question we can ask about the near-death event itself is: Is it even necessary to come close to death to have an NDE? Melvin Morse and his colleagues did find that children who were near death reported NDEs quite frequently, while equally sick children who were not near death did not report any NDEs (Morse, Castillo, Venecia, Milstein, and Tyler, 1986). However, studies of adult NDErs, including my own (Greyson, 1981), those of psychiatrists Glen Gabbard and Stuart Twemlow (1984), and those of Stevenson and his colleagues (Stevenson, Cook, and McClean-Rice, 1989) have suggested that NDEs may be as common among people who think they are near death as they are among people who actually are near death. In fact, Stevenson's group has suggested, perhaps tongue in cheek, that we call these events "fear-death experiences." It seems clear that being near death is not the only trigger for an NDE-like experience; it may just be the most reliable trigger.

We can also ask: How does the individual's personality influence the NDE? Though the studies of Gabbard and Twemlow (1984) and of psychologist H.J. Irwin (1985) suggest that people who have out-of-body experiences tend to be psychologically healthy, very little work has been done on personality traits of near-death experiencers per se.
Psychologists Thomas Locke and Franklin Shontz found no differences in intelligence or personality between a small group of NDErs and a control group who had come close to death (Locke and Shontz, 1983). Preliminary research that I conducted with psychologist James Council showed NDErs score higher than control groups on measures of "absorption" and "fantasy-proneness," two related traits that measure the ability to focus attention narrowly, and on imagined or internal stimuli (Council and Greyson, 1985).

The third category of empirical question that I mentioned earlier is: What are the aftereffects of NDEs? How do NDEs influence personality traits? How do NDEs influence attitudes and beliefs? How do NDEs influence apparent psychic abilities? What parts of the NDE exert these aftereffects? How long do these aftereffects last? This has proven to be the most fertile area of near-death research, for two very different reasons.

The first reason is practical: since the occurrence of NDEs can't be predicted, investigators can't often be there when they occur, but can only study them retrospectively, when the only available data may be the NDErs' recollections. Aftereffects, on the other hand, since they predictably follow the NDE, can be studied prospectively as they evolve, and can often be observed by others.

The longterm effects of NDEs to increase spirituality, concern for others, and appreciation of life, while decreasing fear of death, materialism, and competitiveness are well documented in books by Ring (1984), Sabom (1982), sociologist Charles Flynn (1986), psychologist Margot Grey (1985), P.M.H. Atwater (1988), and numerous articles by these authors and many others, including Russell Noyes (1980, 1981), Martin Bauer (1985), and myself (Greyson, 1983c). Ring's work in particular is notable for his systematic interviewing of "significant others" who can independently confirm the NDErs' claims of altered attitudes, traits, and lifestyles.

The second reason that studying the aftereffects has been the most fertile facet of near-death research is that it is also the most meaningful facet. The NDE itself, striking though it may be, does not sound to the investigator all that different from hallucinations or dissociative states. Its aftereffects, on the other hand, are uniquely profound, pervasive, and permanent, totally unlike the aftereffects of any phenomenologically comparable experience. NDEs are seed experiences, and it is only by studying the fruits that eventually grow from those seeds that we can understand their full meaning.

And we can go further, asking questions about the aftereffects on people other than the NDErs themselves: How do NDEs influence
marriages or other relationships? While this is a largely unstudied area, Atwater (1988) has documented profound "ripple effects" on those close to the NDEr. And how do NDEs influence people who hear or read about them?

While it had been speculated in the infancy of near-death research that hearing about NDEs might make suicide more attractive to some people, psychologist John McDonagh (1979) actually found the exact opposite effect: suicidal patients reading about NDEs as a result found life more meaningful, and suicide less appealing. And Flynn (1986) found that teaching college students about NDEs tended to instill some of the same changes as having an NDE.

Finally, we can ask: How do NDEs influence society? On this point we have no data, but Ring (1984) and philosopher Michael Grosso (1985) have argued that the personal transformations brought about by NDEs are precisely what are needed now on a planetary level to avoid global catastrophe.

The wider influence of NDEs on others leads directly into the fourth category of empirical question that I mentioned: What practical applications do NDEs have? What do NDEs and their aftereffects tell us about how we can better help dying patients—including those comatose; about how we can better help grieving families; about how we can better help suicidal people; and how the beneficial effects of NDEs can safely be induced or replicated?

The fifth category of empirical question was: How are NDEs similar to or different from other experiences? For example, how do NDEs compare with out-of-body experiences occurring in other settings? Gabbard and Twemlow (1984), in making just this comparison, found the NDE to contain no single unique element, but rather a unique pattern of features, most prominent being its profound aftereffects. And how do NDEs compare with mystical experiences that occur in other situations, or with other experiences of "alternate realities"?

In my studies of suicide-induced NDEs, psychiatric patients used many of the same words to describe their NDEs as they did to describe their psychotic or drug-induced hallucinations; yet they insisted that those experiences were in fact nothing at all like the NDE. My data suggest that the mentally ill have neither more nor fewer NDEs than the mentally healthy (Greyson, 1981); and for both groups, the NDE is an experience unlike anything else they have known.

In comparing NDEs to comparable events, we can also ask how NDErs' impressions of death and an afterlife compare with purported evidence of an afterlife from other sources, such as alleged mediumistic communications and reincarnation memories.
And finally, the sixth category of empirical question that I mentioned earlier was: How reliable are NDE reports? How similar are recountings of the same NDE? How does hypnosis or sodium amytal influence recall of NDEs? How does prior knowledge of NDEs influence the NDE report? How does the interviewer influence the NDE report? How does the NDEr's motivation influence the NDE report? Many factors may make an NDEr more willing or less willing to talk about an NDE, or to disclose certain aspects of it.

While my studies show that NDE accounts are remarkably reliable over time (Greyson, 1983b), and not influenced by previous knowledge about NDEs (Greyson and Stevenson, 1980), there is no doubt that an interviewer's encouragement or hostility can markedly influence what an NDEr will reveal. As there is some evidence that NDErs benefit from sharing their experiences with others, the question of how to encourage that sharing becomes a very practical one with therapeutic as well as research implications.

In summary, then, there is a wide range of questions about NDEs, important questions I believe, that can be answered by observations of what NDErs do and say after their experiences.

I asked above "Can science explain the NDE?" I then briefly outlined what science is and what an NDE is; what's left is to emphasize what an explanation is. The inductive scientific method explains things only in terms of how they seem, and how they seem to work. It doesn't explain things in terms of ultimate meaning or purpose or absolute reality. Given that limitation, I think that science not only can explain the NDE, but is well on its way toward that goal.

Having now argued that science can explain NDEs, I want to address briefly the thornier question of whether science should explain NDEs. I think clearly it should, but I also have mixed feelings about the question, and there are times when I'm not so sure of the answer. Let me start by playing devil's advocate, and list the reasons why science perhaps shouldn't try to mess with the NDE.

First is the concern about how we'll use what we learn about NDEs scientifically. Science is without values. Scientific information and conclusions have given us tremendous power over our planet, but no guidance as to how to use it. Our industrialized society, blessed with four centuries of phenomenal discoveries and material progress, is plagued by the runaway consequences of that progress: polluted air and water, overpopulation, manmade diseases, the threat of nuclear war, depletion of our limited energy reserves and of the earth's ozone layer and in fact its very crust.

When you consider the tremendous power the NDE has to transform
the individual NDEr, do we really want to give scientists access to that kind of power? The NDEr comes away from the experience with a deep spirituality and a sense of values and priorities. Will the scientist?

Author and physician Walker Percy had a character in his novel *Love in the Ruins* recite "The prayer of the scientist if he prayed, which is not likely: Lord, grant that my discovery may increase knowledge and help other men. Failing that, Lord, grant that it will not lead to man's destruction. Failing that, Lord, grant that my article in *Brain* be published before the destruction takes place" (Percy, 1971, pp. 7-8).

Secondly, will a scientific explanation of the NDE violate its very nature? Empirical science proceeds for the most part by breaking things down into their component parts. Many NDErs insist that a basic message of the NDE is that things can't be broken apart without losing their essence, that in fact what we usually see as individual objects, including ourselves, are in fact parts of a whole, and that we can only appreciate our own selves by realizing the whole and ceasing to think of ourselves as separate individuals. Can you explain a forest by studying individual leaves and twigs? Can a verbal recitation of the sequence of musical notes convey the essence of a symphony?

Finally, how will scientific study of NDEs affect individual people? Will it encourage NDErs to think of themselves as different from others and isolate themselves? Will it make them feel violated or degraded by having an ultimately unexplainable part of themselves subjected to a superficial attempt at explanation? Will explaining the positive aspects of NDEs and their aftereffects make nonNDErs intolerant of NDErs' human frailties?

These are difficult questions, and since many of them deal with abstractions that are not observable, I don't have answers for them all. But I do have a counterargument for why science should—indeed, why science must—try to explain NDEs. Again, it's based not on observations, but on an assumption. That assumption is that NDEs are meaningful experiences and not mere physiological accidents, and that by studying the changes NDErs undergo, we can learn from them how to help others.

Scientific explanations of NDEs can help individual NDErs come to terms with what happened to them, and figure out how to make the most of that experience. Scientific explanations of NDEs can help dying people prepare for what lies ahead, can help grieving families live again after the death of a loved one, and can help suicidal individuals find meaning in their lives.

Only if NDEs can be explained in scientific terms will they be accepted and respected by those health care providers who need to
understand them in order to help their patients, by the policy makers who decide how we order our priorities, and by society at large, which is so enamored of the scientific method.

The scientific method, with its limitations, is the best method we have for establishing something as being consistent and reliable enough to be meaningful to others. A near-death experiencer may not feel the need for science to explain the NDE, but a scientific explanation of the NDE is the only way of extending the benefits of NDEs from the individual NDEr to nonNDErs and to society at large.

And finally, science must try to explain the NDE because therein lies the key to its own growth. I started this paper with a brief account of the evolution of our search for answers: from mythmaking to deductive science to inductive science. Each of those advances came about because the existing method for answering questions had met its match, and new techniques had to be developed to account for our increasing knowledge of the universe.

But inductive science obviously is not the ultimate tool; we are painfully aware of its limitations. History tells us that only in trying to explain phenomena currently beyond its reach does science evolve new methods.

I believe the NDE is one of those puzzles that just might force scientists to develop a new scientific method, one that will incorporate all sources of knowledge, not only logical deductions of the intellect, and empirical observations of the physical, but direct experience of the mystical as well. But that is another story.

References


Psychic Phenomena Following Near-Death Experiences: An Australian Study

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ABSTRACT: This study examines the incidence of reports of psychic phenomena and associated beliefs both before and after the near-death experience (NDE). The near-death experiencers interviewed reported no more psychic phenomena before the NDE than the general population. There was a statistically significant increase following the NDE in the incidence of 14 of 15 items examined.

The near-death experience (NDE) occurs when a person is on the brink of death, or in some cases actually clinically dead, and yet survives to recount an intense, profoundly meaningful experience. Although there have been a number of studies conducted in other countries, to date there has been no detailed empirical study of the phenomenon in Australia.

In 1980-1981, a major survey by George Gallup, Jr. (1982) discovered that eight million Americans, or approximately five percent of the adult American population, have had what Gallup called a "verge-of-death" or "temporary death" experience with some sort of mystical encounter associated with the actual "death" event. In view of the

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major changes in values and beliefs that can occur as a result of these experiences, this is a figure of sociological significance and importance.

This paper describes the reports of paranormal events in the lives of 40 near-death experiencers interviewed as part of an ongoing study of aftereffects of NDEs.

**The Presence of Psychic Phenomena**

Most of the early studies of the NDE focused on the phenomenology of the experience itself. Bruce Greyson and Ian Stevenson (1980) reported the incidence of paranormal features occurring in the NDE itself.

Interest in the aftereffects of the NDE has grown in recent years. Kenneth Ring (1980, 1984) and Margot Grey (1985) described a range of aftereffects. Richard Kohr (1982) compared the psychic and psi-related experiences of near-death experiencers with two other groups within his sample, and Greyson (1983) specifically sought to compare the incidence of psychic phenomena in the lives of near-death experiencers before and after their NDEs. Both Kohr and Greyson used in their studies the questionnaire developed by John Palmer (1979) for his "Community Mail Survey of Psychic Experiences" among a general population of townspeople and students in Charlottesville, Virginia.

When examining my own data, it soon became clear that unless I could compare the incidence of psychic phenomena reported by my sample before their NDEs with the incidence in a general population, I would have no way of knowing whether the near-death experiencers I was interviewing could be considered "normal" before their NDEs or whether they were already unusually gifted psychically. In addition to Palmer's study (1979), those by Susan Blackmore (1984), Erlendur Haraldsson (1985), Kohr (1980), and the Roy Morgan Research Centre's "Australian Values Study Survey" (1983) provided data on the reported incidence of psychic experiences and associated beliefs among a general population.

Kohr (1982) analyzed data from a national survey of 547 members of the Association for Research and Enlightenment, a group having interests in parapsychological phenomena, dreams, and meditation. Although it is not possible to generalize from the results of that study to a wider population, it is possible to make comparisons among three categories within that special group: 84 near-death experiencers; 105 nonexperiencers, who had been close to death but had not had an NDE; and 358 others who had never been close to death. The results showed that the near-death experiencers reported more psychic and psi-related
experiences than the nonexperiencers and others. Overall Kohr found a substantial difference between the near-death experiencers and the other two groups, which was statistically significant for all variables.

A similar pattern was shown in relation to changes in belief between near-death experiencers and nonexperiencers by a number of researchers (Ring, 1980, 1984; Flynn, 1986; Grey, 1985; Greyson and Stevenson, 1980). Michael Sabom (1982) found that belief in an afterlife increased dramatically among near-death experiencers, while there was no change in belief among nonexperiencers. Similarly, he found a marked decrease in fear of death among near-death experiencers, while among nonexperiencers 39 out of 45 reported no change and the remaining five reported an increase in fear of death.

As Kohr (1982) and Greyson (1983) suggested, there are at least three possible explanations for such differences:

1. near-death experiencers are more psychically sensitive prior to their NDEs,
2. near-death experiencers tend to focus more attention on psychic and psi-related experiences, or
3. there is actually an increase in the incidence of psychic and psi-related phenomena in the lives of people after an NDE.

Method

Subjects for this study were located by various means. Since my interest centered on the aftereffects of the NDE rather than on the experience itself, I wished to contact people who had had their experience more than two years earlier. It was therefore not appropriate to use hospital facilities as a source of respondents.

The 40 near-death experiencers interviewed for this study were located by the following means:

1. 3 subjects responded to my published articles on the subject, which included details of my own NDE (Sutherland, 1987–1988, 1988);
2. 5 subjects responded to public talks I gave;
3. 2 subjects responded to media interviews;
4. 11 subjects were recruited from a sample of experiencers already obtained by another researcher; and
5. 19 subjects were referred to me by a third party who had read my articles, heard me speak, or met me in some other context.
I personally interviewed these 40 respondents, usually for 90 minutes, although at times I spent much longer with them. These interviews dealt with a wide range of issues, of which the incidence of paranormal phenomena in their lives was only one. No effort was made to verify the claims of psychic phenomena either before or since the NDE, apart from asking for explanations and examples of reported phenomena. I chose to use a semistructured or "focused" interview because of its flexibility and comparability. This style of interview, although time-consuming in preparation, administration, and collation of data afterwards, allowed for unanticipated answers by the interviewees and provided sufficient freedom to explore further any areas that I considered fruitful at the time. I was therefore able to collect on tape detailed data that emphasized the areas of greatest interest to each of the subjects.

Questions used in this study were loosely based on Ring's Psychic Experience Inventory (1984). However, because of the different format of my interviews, a number of his questions were omitted, and some additional questions were included. In most cases, Ring's explanation of each phenomenon was given before the question was asked. Overall my questioning was more open-ended than Ring's. For example, I began this section of my enquiry by describing what psychic phenomena refer to and asking whether before their NDEs these people had ever heard of such things. If so, I asked what their attitude to them was before their NDE, and then, what their attitude to them was after. I then asked if they ever had such an experience.

At this point I followed the lead of the interviewee, pursuing whatever experiences they spoke of and recording examples. Once their own examples had been concluded, I worked through my checklist, asking about any experience not so far mentioned. As a result of this approach, I was presented with a number of examples of experiences not explored in comparable studies listed in Table 2, such as clairaudience, automatic writing, visions of the future, predictions made during the NDE that have since come to pass, and being able to enter the body of another person.

I calculated percentages of subjects who had experienced each of four paranormal elements during their NDEs, and percentages of subjects who responded positively to questions concerning each of twelve paranormal experiences and four associated beliefs, both before and after the NDE.

I then performed chi-squared tests against the null hypothesis that there had been no change because of the NDE, and compared my results with studies of a general population to determine whether my
sample had been "normal" or unusually psychically sensitive before their NDEs.

Results

Subjects

The 40 respondents included 13 men and 27 women. Their ages at the time of the NDE ranged from 7 to 58 years. Of the respondents, 25% were 19 years old or younger, 50% were 20 to 39 years old, and 25% were 40 to 59 years old. The number of years elapsed since their NDE ranged from 2 to 52.

The NDEs in this sample occurred as a result of illness in 13 cases; surgery or postoperative complications in 9 cases; pregnancy, miscarriage, or childbirth in 8 cases; serious injury in 6 cases; drowning in 2 cases; poisoning in 1 case; and suicide in 1 case.

Psychic Phenomena During the NDE

Descriptions of psychic phenomena associated with the NDE itself were taken from the accounts of the experience given during the interviews. These are summarized in Table 1, where three items are compared with results from a study by Greyson and Stevenson (1980).

Table 1
Incidence of Paranormal Phenomena During the NDE

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Percent subjects reporting phenomenon in this study</th>
<th>Percent subjects reporting phenomenon in Greyson and Stevenson (1980)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out-of-body experience</td>
<td>93</td>
<td>75</td>
</tr>
<tr>
<td>Presence or spirit</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Extrasensory perception</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Transcendental environment</td>
<td>40</td>
<td>-</td>
</tr>
</tbody>
</table>
For no items was there a significant difference between the percentages reported by Greyson and Stevenson and in my sample.

Out-of-body experiences were reported by 37 respondents (93% of my sample); 26 of these (70%) claimed to have realized they were outside of their bodies when they saw their own physical body below them. Greyson and Stevenson (1980) found that 75% of their sample of 78 near-death experiencers similarly reported feeling or seeing themselves to be outside the physical body.

In addition, 19 respondents (48% of my sample) reported meeting some person, spirit, or presence either known or unknown to them; 8 of these (42%) encountered a deceased relative. The others reported seeing angels, luminous beings, beautiful people, and/or a "being of light." One woman reported encountering numerous relatives who had died before her birth, and a dog who had been a childhood pet. Almost half (49%) of Greyson and Stevenson's (1980) sample reported seeming to meet some person(s) not physically present.

Receiving some communication during the time they were out of their bodies was reported by 18 respondents (45% of my sample). This communication ranged from simple messages such as "go back" to quite lengthy telepathic interchanges. One woman whose experience occurred during childbirth reported having been told telepathically that she had to go back since she was going to give birth to a son and would need to bring him up alone. Despite her wish to stay, she did go back, did give birth to a son, and one year later was deserted by her husband. Greyson and Stevenson (1980) found that 39% of their sample reported apparent extrasensory experiences.

Finally, 16 respondents (40% of my sample) described a transcendental environment that they had visited. The most common description was of a very beautiful place: a garden, gentle rolling hills, green pastures, or a magnificent forest. Two people described a stream and one man reported being taken through a beautiful countryside past a stream, to a city, and into a building, called the archives, which held all knowledge. Once reaching this transcendental environment, all wished to stay but were either forced to return or more gently persuaded to do so.

Increase in Psychic Phenomena After an NDE

Percentages of my subjects reporting psychic phenomena are listed in Table 2, along with available comparisons with studies of general populations. The number of subjects varies for each item, as I have
Table 2
Reports of Paranormal Experiences and Beliefs Before and After NDE

<table>
<thead>
<tr>
<th>Experience</th>
<th>General population reporting experience</th>
<th>Subjects reporting experience before NDE</th>
<th>Subjects reporting experience after NDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clairvoyance (n = 37)</td>
<td>38%(1)</td>
<td>43%</td>
<td>73%</td>
</tr>
<tr>
<td>Telepathy (n = 39)</td>
<td>58%(1), 36%(2)</td>
<td>46%</td>
<td>87%</td>
</tr>
<tr>
<td>Precognition (n = 37)</td>
<td>–</td>
<td>57%</td>
<td>89%</td>
</tr>
<tr>
<td>Déjà vu (n = 37)</td>
<td>–</td>
<td>76%</td>
<td>84%</td>
</tr>
<tr>
<td>Supernatural rescue (n = 37)</td>
<td>–</td>
<td>38%</td>
<td>78%</td>
</tr>
<tr>
<td>Intuition (n = 37)</td>
<td>–</td>
<td>60%</td>
<td>95%</td>
</tr>
<tr>
<td>Guidance (n = 38)</td>
<td>43%(3)</td>
<td>37%</td>
<td>92%</td>
</tr>
<tr>
<td>Dream awareness (n = 37)</td>
<td>42%(1)</td>
<td>43%</td>
<td>76%</td>
</tr>
<tr>
<td>Out-of-body experience (n = 39)</td>
<td>14%(1), 12%(2)</td>
<td>18%</td>
<td>51%</td>
</tr>
<tr>
<td>Spirits (n = 38)</td>
<td>27%(1), 26%(2)</td>
<td>24%</td>
<td>68%</td>
</tr>
<tr>
<td>Healing ability (n = 37)</td>
<td>–</td>
<td>8%</td>
<td>70%</td>
</tr>
<tr>
<td>Perception of auras (n = 36)</td>
<td>5%(1)</td>
<td>14%</td>
<td>47%</td>
</tr>
<tr>
<td>Beliefs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>psychic phenomena (n = 36)</td>
<td>39%(4)</td>
<td>44%</td>
<td>97%</td>
</tr>
<tr>
<td>Reincarnation (n = 33)</td>
<td>31%(2), 32%(3)</td>
<td>39%</td>
<td>79%</td>
</tr>
<tr>
<td>Life after death (n = 34)</td>
<td>42%(2), 59%(3)</td>
<td>47%</td>
<td>100%</td>
</tr>
<tr>
<td>Fear of death (n = 32)</td>
<td>–</td>
<td>78%</td>
<td>0%</td>
</tr>
</tbody>
</table>

(1) United States
(2) Great Britain
(3) Australia
(4) Sweden

All differences between percentages before and after NDE are significant at $p < .001$ except for déja vu.

eliminated from analysis in each case those respondents who had not heard of, or thought about, various phenomena or beliefs by the time of the NDE. This affected particularly subjects who had had their NDEs as children. Chi-squared tests were used to estimate the probability of
no change due to the NDE, except for healing ability, for which the Poissonian distribution was used because some cells had expected values less than 5.

Significant increases following NDEs were found for all items except déjà vu. Greyson (1983) also found the increase in déjà vu not to be statistically significant. A number of respondents noted that the incidence of déjà vu was greater when they were children, although they still experienced the phenomenon now.

With regard to beliefs in reincarnation and life after death, the results tend to obscure the actual complexity of these beliefs. As the number of subjects shows, several people had not thought about either of these beliefs, or about death generally, before the NDE, and therefore were eliminated from the analysis for the purposes of this study. Of those remaining, 39% said that they had believed in reincarnation before their NDE. This figure hides the fact that many of these believed in it only "a bit," whereas those who believed in it afterwards (79%) tended to be more convinced. In addition, there were three respondents who did not believe in it before, but since the NDE now "tend to" believe.

Similarly, before the NDE 47% said that they believed in life after death. However, this particular belief generally concerned ideas of heaven, hell, and purgatory, notions that had been a part of their religious training as children. After the NDE 100% of my sample believed in life after death, and the beliefs they hold now are based on their own experiences and in many cases explicitly contradict the views held earlier. More than three-quarters (78%) of my sample said that they had a fear of death before the NDE, whereas not one person among my sample has a fear of death now, and many laughed at the question.

Data presented in Table 2 show that percentages of "general population" answering positively to these items are comparable to percentages of my subjects before the NDE, evidence of the "normality" of my sample in this regard.

Discussion

I did not ask specifically whether my subjects focused more attention on psychic and psi-related activities after the NDE. However, it is evident from my data that there is a great variety of responses to these psychic phenomena. Some experiences seem to be absorbed into daily
life and accepted as “normal” while others demand more attention because of their more disruptive nature.

For example, those who experience them seem to take clairvoyant (73%) or precognitive (89%) flashes in their stride, at times not even paying particular attention to them. On the other hand, those who have out-of-body experiences (51%) could be said to focus on them, since they are not easy to ignore, whether engaged in voluntarily or occurring spontaneously. Of the phenomena most commonly experienced, 92% said that since the NDE they have felt more in touch with an inner source of wisdom and noted a very strong sense of being guided.

There are, however, cases among my sample whose response to an increase in psychic sensitivity has been extreme. There are four women, aged 43 to 65, who before the NDE were school librarian, office worker, and housewives, who now work with their psychic gifts as healers. At the other extreme there are four men, aged 56 to 65, who have tried to suppress their psychic capabilities because they feel so uncomfortable with them. This does not mean that they have been able to eliminate them entirely from their lives, but they have managed to stop certain activities, such as going out of the body and reading people’s minds. The sex difference between these two extreme groups is worth noting and not entirely surprising, considering the socialization of men and women in Western industrial societies.

Overall, every person I interviewed was aware of the increase in psychic phenomena in their lives, although the degree of this increase varied, and two respondents stated that they had not connected the increase with their NDEs until the interview.

As a final question in my interview I always ask what each subject would say is the most significant change that has come about for him or her as result of the NDE. It is interesting to note that not one person mentioned the increase in psychic phenomena. Focusing, as I have in this paper, simply on this aspect therefore does not adequately reflect the breadth of changes in the priorities of these people. Neither does it accurately reflect their principle focus. Overwhelmingly their focus is on spiritual growth.

In conclusion, this study, with its present limitation of a small sample size, nevertheless demonstrates clearly the increased reports of psychic phenomena in the lives of near-death experiencers, confirming Greyson’s findings (1983) with regard to those features the two studies have in common. The hypothesis that near-death experiencers were already more psychically gifted cannot be maintained in the face of comparisons with general populations. I hope with a larger sample to
gain insight into the sociological significance of this increase in psychic phenomena in daily life.

References

Assessing Psychologists' Knowledge and Attitudes Toward Near-Death Phenomena

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Southern Illinois University

ABSTRACT: Nina Thornburg's (1988) Near-Death Phenomena Knowledge and Attitudes Questionnaire was distributed to 326 randomly selected Illinois psychologists. Of 117 usable questionnaires received, the mean score for knowledge questions was 7.5 of a maximum score of 18. Respondents were most knowledgeable about near-death elements of peace, out-of-body transcendence, and tunnel/light phenomena. The mean score for the attitude portion of the instrument was 61.3 of a maximum score of 85 points for the most positive attitude. Seven percent of the respondents indicated having had a near-death experience, 19% indicated having counseling near-death experiencers, and 28% indicated having had personal contacts with an experiencer.

Although death is an inevitable reality of life, what occurs after the body's physiological functions have ceased remains a mystery. Perhaps to attain some control over and understanding of our forthcoming demise, human beings throughout history have recorded stories of characters who claim to have actually died and returned to inform us about the afterlife (Kastenbaum, 1979; Audette, 1982).

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While these near-death experiences (NDEs) have been described for more than 4000 years, people have only begun to look at the subject from a scientific perspective during the past 25 years. Despite the expanding attention near-death phenomena have received recently, health care professionals and family members often cannot relate to the concept of an NDE, choosing to discount the experiencer's claims as a stress-induced or drug-induced illusion. There are a number of variables that account for this unwillingness to listen, many of which are associated with our Western cultural fear of death, as well as the inability and unwillingness to relate to a phenomenon that suggests another realm of existence.

Although health care professionals are, perhaps, most directly accessible to near-death experiencers immediately following near-fatal encounters, little has been done in the way of researching this population. Nurses recently have begun to evaluate existing knowledge and attitudes within their profession (Orne, 1986; Papowitz, 1986; Strom-Paikin, 1986; Thornburg, 1988). Literature is scant regarding knowledge and attitudes of other health care professionals concerning this topic.

The purpose of this study was to determine the knowledge and attitudes of registered psychologists toward near-death phenomena. Secondary purposes of this study were (a) to determine how many of these psychologists had been confronted by clients who claimed to have had an NDE, and (b) to determine how many psychologists have themselves undergone an NDE.

**Need for the Study**

Approximately eight million adults have undergone an NDE within the United States (Gallup, 1982). As noted by Kenneth Ring (1984), a number of these experiencers encounter depressive aftereffects due to a lack of sensitivity and understanding on the part of health care professionals and family members. It is obvious that the needs of many near-death experiencers are not being served at present. Since nurses, physicians, psychiatrists, psychologists, clergy, social workers, family members, and health educators are the most likely populations to come into contact with experiencers immediately following an NDE, it might be beneficial to investigate their knowledge and attitudes regarding this topic. As psychologists are a likely population for dealing with suicide and death-related stress, information from this study could prove to be professionally beneficial.
Based on informal observation and preliminary research, it appears that individuals merely exposed to information about NDEs develop a diminished fear of death (Ring, 1982). This change is particularly evident when direct contact is made with a near-death experiencer. As Ernst Becker (1973) noted, our lives are dominated, both consciously and unconsciously, by the fear of death. We often waste potentially productive energy worrying about death. Knowledge of NDEs has also been used to deter suicide (McDonagh, 1979; Ring, 1980, 1982; Ring and Franklin, 1981–1982).

The implications for near-death studies are evident here, particularly in the area of mental health and death education. Health educators can inform health care professionals and the general public about this topic, thus "normalizing" the phenomenon. In that way, near-death experiencers in need of counseling may feel more comfortable about seeking therapy, and therapists and other mental health specialists will be better prepared to meet the emotional needs of the client.

Method

Subjects

The population sampled for this study was drawn from a State of Illinois Department of Registration and Education listing of 2,027 registered psychologists. A total of 326 questionnaires were distributed to a randomly selected sample from this list, and 117 usable questionnaires were obtained for a 36 percent return rate.

Instrument

To determine the knowledge and attitudes of registered psychologists toward near-death phenomena, Nina Thornburg's (1988) Near-Death Phenomena and Attitudes Questionnaire was used. The pilot study used in developing this instrument elicited responses from a sample of convenience consisting of 20 registered nurses employed within the Intensive Care and Coronary Care Units of a large Midwestern medical center.

Thornburg used a panel of experts selected from nursing, sociology, and psychology in establishing the content validity of the instrument, and knowledge and attitude portions of the instrument were tested for
internal consistency. Data were factor analyzed to establish construct validity for the knowledge and attitude portions of the instrument. Only questions with a factor loading greater than .51 were retained. Likewise, Cronbach alpha reliability coefficients were obtained in determining internal consistency of each subscale obtained from factor analysis.

Factors and corresponding alpha coefficients for knowledge questions included: knowledge of the NDE (.84), causes/correlates of the NDE (.77), concomitant events/activities associated with NDEs (.72), and knowledge about persons' perceptions (.72). Factors and alpha coefficients for questions regarding attitude toward NDEs included: reporting NDEs (.90), factors influencing/affecting care (.70), psychological implications of NDEs (.80), and patient care activities surrounding NDEs (.73). Factors and alpha coefficients for questions regarding attitudes toward care of clients included: importance of nurses' attitudes to patient care (.92), patients' perceptions of their NDEs (.76), and nurses' awareness of the effect of NDEs on patients (.70).

Minor modifications in the original instrument made it easier to code and more applicable to registered psychologists. The first of these modifications included re-labeling each set of questions by section for further clarification. We also added questions pertaining to the subjects' exposure to near-death experiencers as clients, subjects' exposure to close friends and family who have reported an NDE, subjects' active involvement in counseling clients, number of client contact hours per week, and type of work setting.

The modified instrument used in this study consisted of 7 general information questions, 18 cognitive questions, 17 affective questions, 15 professional questions, and 11 demographic questions. According to Thornburg (1988), components of the knowledge scale included elements of the NDE, predisposing and precipitating factors, sequelae of the NDE, and possible etiologies of NDEs. Components of the attitude scale included possible etiologies of the NDE, near-death education, health care participation, and health care providers' roles in dealing with near-death phenomena.

General knowledge and information items included open-ended questions for additional clarification and questions requiring a "yes" or "no" response. Specific knowledge items were presented in a format requiring a "true," "false," or "undecided" response. Correct responses were given a numerical value of one, and incorrect or undecided responses were scored as zero.

Attitude questions were composed of positive and negative statements related to near-death phenomena and care of near-death experi-
encers as clients. Respondents chose from a range of responses including "strongly agree," "agree," "uncertain," "disagree," and "strongly disagree." Each response was given a number value of from one to five, with positive responses, as determined by Thornburg, scored so that an answer of "strongly agree" was assigned a value of five, and negative responses scored so that an answer of "strongly disagree" was assigned a value of five. Assignment of "correct" responses to knowledge questions, and "positive" and "negative" labels to attitude questions, followed the scoring procedure used by Thornburg in her original instrument (1988).

Data Collection

The instrument was mailed to 326 registered psychologists randomly selected by a standard computer algorithm from the Illinois Department of Registration and Education listing. A cover letter, instrument, self-addressed postcard, and self-addressed return envelope were provided for each participant. The cover letter explained the purpose of the study, the estimated time to complete the questionnaire, a requested deadline date, and instructions on returning the self-addressed stamped envelope and postcard.

Participants were asked to return the postcard separately when returning the completed questionnaire, so that participating subjects' names could be removed from the resampling list. A space was also included on the postcard asking respondents if they would like to obtain the results of the study and a list of clinical applications involving near-death phenomena. A reminder postcard was sent to subjects 10 days after the first mailing, and an additional follow-up mailing of the original packet was forwarded to those failing to return a completed instrument within 10 days of the reminder postcard.

Results

Respondents

A total of 117 usable questionnaires was received, for a response rate of 36 percent. Of the participating sample, 58% were male and 41% female, and 1% did not indicate gender. The mean age for all respondents was 46 years. The majority of respondents had earned a Doctor of Philosophy degree (78%), and most were clinical psychologists (81%).
The largest percentage worked in private practice (38%), and 81% were currently counseling clients. The mean number of clinical hours for all respondents was 16 hours a week, while the average for those currently counseling clients was 19 hours. Approximately half of all respondents attended a church or synagogue (49%), with the majority belonging to the Protestant (37%) and Jewish (20%) faiths.

Knowledge

The mean score for knowledge questions was 7.5, with a range from 0 to 18. Respondents were most knowledgeable about questions dealing with the NDE element of “peace,” with subsequent belief in an afterlife, with the similarity among experiencers’ descriptions of NDEs, and with experiencers’ being told or deciding to return to the physical body from the out-of-body state. In their written descriptions of NDEs, respondents most often mentioned out-of-body transcendence, and tunnel/light phenomena. Respondents were least knowledgeable about questions dealing with the relationships between drug use and NDEs, and between attempted suicide and NDEs.

While the majority (88%) of respondents indicated that they were familiar with the term “near-death experience,” many mentioned in their written descriptions of NDEs only one of the 15 elements described by Raymond Moody when he coined the term (1975). Based on the limited content of respondents’ written descriptions of NDEs and their mean knowledge score (7.5), it is evident that respondents were indeed familiar with the term NDE but may have lacked a comprehensive understanding of the subject. There were no significant differences between male and female respondents on knowledge scores.

Attitudes

The mean score for the attitudes portion of the instrument was 61.3 of a possible 85 points, with a range from 0 to 81. Higher scores represented more positive attitudes toward near-death phenomena.

A positive correlation was found between knowledge scores and attitude scores of all respondents ($r = .54$, $p < .0001$), and separately for males ($r = .52$) and females ($r = .60$). There were no significant differences between male and female respondents on attitude scores. Approximately 20% of the variance between knowledge and attitude scores was attributable to age ($r = .20$, $p = .0001$).
A total of eight participants (7%) indicated having personally had an NDE. However, based on the inadequate content of their written NDE accounts, that incidence rate may be slightly exaggerated. Likewise, 19% of the psychologists reported having counseled clients who had NDEs, and 28% indicated having had personal contact with a near-death experiencer, either as a client or as a friend or relative. Neither knowledge nor attitude scores were significantly correlated with having had an NDE or having been exposed to a near-death experiencer.

Discussion

Based on the analysis of these data and subjective comments of our respondents, it appears that participating psychologists demonstrated limited knowledge of near-death phenomena, but maintained a moderately positive attitude toward the topic. However, data may have been influenced by confusion about the definition of a “near-death experience.” Current literature on the subject has come to define NDEs primarily in accordance with descriptive elements enumerated by Moody (1975) and Ring (1980, 1984). The literal meaning, as indicated by some of the psychologists’ descriptions, may also include any circumstance in which a person has come close to death. Therefore, care should be taken in defining knowledge and attitude based on the label “NDE” alone, the literal meaning of which is not limited to transcendental phenomena.

There were also a number of criticisms raised concerning the questionnaire itself. The nature of the introductory sample questions may have biased responses in that they reflected positive attitudes toward near-death phenomena. The limited number of questions within each section of the instrument may have restricted its ability to demonstrate comprehensive individual knowledge and attitudes. Although the research instrument was found to have internal consistency, its overall validity is open to question.

In general, there were no significant differences in knowledge and attitude scores based on having had an NDE (7% of respondents) or having counseled clients with NDEs (19% of respondents). Perhaps this was due to the fact that the average respondent was 46 years old, while widespread media exposure of NDEs has been present only for the past 10 to 15 years, so that information and resources may not have been available at the time of the NDE. There were also no significant differences in knowledge and attitude scores based on age and gender, and knowledge scores had only a moderate positive influence on attitude scores.
Based on subjective comments, there was also a wide range of feelings expressed toward the topic itself, from sympathy to antagonism. Nevertheless, many respondents indicated an interest in obtaining information relative to the clinical applications of near-death phenomena. Some psychologists cautioned, however, that this topic should be of no greater relevancy than other areas of personal concern. Although that point is well taken, NDEs have not yet become "normalized" within the field of psychology or any other health care profession.

Considering that an estimated eight million Americans have experienced NDEs, and in light of the fact that 19% of responding psychologists indicated having been told of NDEs by clients, the potential for professional exposure to these phenomena is high. Likewise, as our elderly population continues to grow and improved methods of medical intervention are applied, the potential for an increase in NDEs seems probable. Therefore, it is evident that this is an area of clinical concern that should warrant educational involvement within the fields of health education, psychology, and related human service professions. Such efforts would facilitate better clinical care, so that the emotional needs of clients who have undergone NDEs may be recognized and served.

References


BOOK REVIEW

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With the publication of Scott Rogo's miserably entitled but well written book, The Return from Silence, the field of near-death studies has finally gained a volume that competently introduces the general reader to the near-death experience (NDE). Though not strictly intended as or written in the style of a textbook, Rogo's work nevertheless beautifully serves this function for the field, and for this all serious students of the NDE will be indebted to him. Prior to Rogo's book, we had only Howard Mickel's self-published introduction to the NDE (Mickel, 1985), which, though not without its merits, was too skimpy and incomplete to fulfill the requirements of a general text on the subject; in addition, not being commercially available, Mickel's book could never reach a wide audience. Of course, we have long had two useful NDE anthologies, Craig Lundahl's (1982) and Bruce Greyson and Charles Flynn's (1984), but these collections are geared to the interests of professionals and not to the general public. Thus, Rogo's contribution to the study of the NDE fills an important niche that has until now been noticeably vacant. As a result, when someone new to the NDE phenomenon asks me what books I would recommend, hence-

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forth I can say: "Start with Raymond Moody's *Life after Life* (1975) and then read Rogo."

Of course, even without knowing more about this book, you can already appreciate that it does suffer from an unfortunate handicap: its insipid title which, in the field of near-death studies, is the worst since Flynn's still unrivaled *After the Beyond* (1986). Not only is Rogo's title completely vapid, but it fails utterly to alert the prospective buyer to the subject matter of the book. Moreover, it is even misleading since in this volume Rogo himself emphasizes what most other writers on the NDE have neglected, viz., the role of transcendental music in these experiences.

Before turning my attention to the contents of this book, I would like to insert one more prefatory comment. As an instructor for a university undergraduate course on the NDE, I was astonished at how closely Rogo's presentation of topics and his approach to the NDE in general parallel my own. His book, in fact, represents an excellent summary of the material and point of view I introduce my own students to during the first two-thirds of the course. Ironically, because there was so much overlap between us, I ultimately decided not to adopt Rogo's book as my text; he draws on so many of the same sources I do for my lectures that my professorial raison d'être would be vitiated while my best stories would already be told if I were to assign Rogo's book! So I didn't—but to salve my conscience and not deprive Rogo of his just royalties, I adopted another probing book of his on a similar topic, *Life After Death* (1986).

Now, as promised, let me review and comment on the contents of this book.

The first chapter is concerned with defining the NDE and giving some examples of it. What is noteworthy and distinctive about Rogo's approach to the NDE is made clear at the outset of this chapter: he is at pains to define the NDE in a very strict—I would say overly strict—way. Rogo, of course, has long distinguished himself as a deep student of the out-of-body experience (OBE) (Rogo, 1978, 1983) and for him this is an absolutely fundamental component of the NDE. Not only must the individual have been close to or threatened by the prospect of death, but for an NDE to be said to occur: "the person should either experience him/herself out-of-body sometime during the experience or his/her observations should imply he/she is functioning in such a state" (p. 15). Rogo's justification for this "tight" definition of the NDE hinges in part on his dissatisfaction over what he sees as sloppy and imprecise usage of the term and in part on his wish to exclude experiences from NDE status that merely share some features with NDEs (e.g., being
bathed in light) without being triggered by a near-death event. These are, to be sure, reasonable grounds to begin with and certainly as the book progresses, it becomes increasingly obvious why Rogo has insisted upon making the OBE aspect crucial to his definition of NDEs.

Nevertheless, to my mind, whatever its virtues, it also has the drawbacks of a Procrustean solution. What Rogo has done, of course, is to rule out by definitional fiat many experiences that most investigators would unhesitatingly want to call NDEs. Indeed, some of my best NDEr friends would be NDErs no longer by Rogo's criteria—despite their having been close to death, undergoing profound spiritual experiences while in that state, and exhibiting the transformative changes typical of NDErs afterward. To deny such persons NDEr status is of course not merely arbitrary—it is absurd. Rigorous use of Rogo's criteria would also mean that much of Albert Heim's historical NDE research and Russell Noyes's recent work now fall outside the pale, which again is ludicrous.

Thus, in his well-intended effort to trim the somewhat unruly locks of the NDE, Rogo has inadvertently lopped off its nose and ears and in doing so, has simply made a mess of what he meant to clean up. Though I happen to agree with Rogo that the NDE is best conceived as a type of OBE, the way he wields his scissors is more dangerous than useful. Fortunately, I don't imagine most students of the NDE—to say nothing of NDErs themselves—are likely to endorse this "purified" definition of the NDE. Rejecting it, however, in no way prevents one from making use of the many valuable insights about NDEs that Rogo will offer throughout the remainder of his book.

Chapters two and three deal with historical studies of NDEs and related phenomena. The first of these chapters is largely given over to a summary of Carol Zaleski's brilliant study of NDEs and similar visions associated with medieval Christianity. The next chapter is an extended discussion of what Rogo calls "secular reports" where he is mainly concerned to parade the important contributions made to the study of death related phenomena (e.g., deathbed visions) by psychical researchers. These studies set the table for modern NDE research and Rogo deservedly gives them a prominent place in his book. His argument here also makes it evident that NDEs must be understood as having undeniable conceptual links with other death-related phenomena and that any general model offered to "explain" NDEs must subsume these factors as well—a point with which I fully concur.

Chapter four brings us to the contemporary period of NDE research and features a review of the work of Moody, Kenneth Ring, Michael Sabom and Margot Grey. The general findings of these investigators
will be known to most readers of this Journal, so I will only note that Rogo's treatment of his material is handled in his usual lucid manner.

Beginning with chapter five and extending through the next four chapters, the form of the book changes. In effect, in dealing with selected aspects of NDEs, Rogo stages a debate of sorts between the critics of NDE research and its proponents. Rogo soon shows that he will side with its defenders, but he strives—and I think he succeeds—to let the critics and skeptics get their hacks in. Indeed, one of the strengths of Rogo's book is its thoughtful consideration of various conventional alternative explanations of the NDE and criticisms of NDE research. Throughout, Rogo displays an admirable willingness to entertain many divergent points of view about this phenomenon even when his own sympathies are evident.

In this spirit, then, chapter five presents a topic of widespread current interest in the field—childhood NDEs. Here, Melvin Morse's early work (but not his more recent contributions) is considered, along with a few case histories reported by Glen Gabbard and Stuart Twemlow. In addition, the pioneering research by former IANDS executive director Nancy Evans Bush is discussed at some length.

Chapter six explores the question of whether psychedelic drugs can induce NDE-like experiences (yes) and if so, what does that mean (take your choice). Interestingly, most of this chapter is devoted to the effects of a particular dissociative anaesthetic, ketamine. This substance, when used at sub-anaesthetic levels, brings about a very distinctive state of consciousness that some researchers have characterized as thanatomimetic—and therefore possibly similar to what is experienced during an NDE. But before you badger your local anaesthesiologist for an injection, let me advise you that personally, I am not so persuaded as is Rogo (whose overture to experience the effects of this drug himself was neatly squelched by one of Ronald Siegel's bon mots) about its comparability to NDEs. Several years ago, I had the opportunity to judge this matter for myself when I was a subject in a pilot project then being conducted by a Californian oncologist. At that time, he was working with terminally ill cancer and AIDS patients and wished to explore the possible value of ketamine in affording such patients a "rehearsal for death." His reasoning, following the approach of Stanislav Grof and Joan Halifax (1977), was that if an NDE-like state could be induced by these means, it might significantly reduce his patient's death anxiety and thereby increase the chances of an easeful passage into death.

For what it's worth, my own experience and those of others with whom I've since had a chance to compare notes incline me to emphasize
ketamine's qualitative dissimilarities to NDEs. A better and more stringent test, of course, would be for an NDEr to take ketamine himself and speak to the comparability of these experiences. For me, though, the jury's still out on this one.

One final note on this chapter. Oddly enough, Rogo scarcely mentions, except in passing, the effects of (high dose) LSD sessions which, on occasion, can certainly bring about full-blown NDE-type states of transcendence. But since I have discussed this matter elsewhere (Ring, 1988), I'll digress no further here.

Chapter seven turns our attention to the thorny and persistent problem of negative NDEs—an issue that Rogo thinks NDE research has unfairly neglected. His own review of these experiences is based chiefly on the tendentious and disputed work of Maurice Rawlings and secondarily on four case histories and a conceptualization of negative NDEs contributed by Grey. Nevertheless, there seems little doubt that negative NDEs do occur and that they merit more attention than they have yet received. Rogo has done us a service by suggesting that we might well deepen our knowledge of NDEs through the study of what, figuratively speaking, is their shadow side.

Again a personal exception to one of Rogo's statements here: He asserts (p. 135) that only Sabom among mainstream NDE researchers has acknowledged Rawlings's work. This is not so. In Life at Death, I devote four full pages to a critique of Rawlings's research (Ring, 1980, p. 192–196), by which I still stand.

In chapter eight, Rogo directly confronts the skeptics in considering and attempting to rebut a long list of counter-arguments to the notion that the NDE represents an objectively real phenomenon. The result of this interchange is not merely (at least in the author's eyes) Rogo's victory, but an enhanced appreciation for the complexity of this perhaps ever-elusive experience.

The next chapter affords an opportunity for Rogo to dwell on various paranormal features of NDEs. He begins by reconsidering Sabom's important research on apparent paranormal OBE-based veridical perceptions in operating room settings in the light of a possible artifact—sensory cuing—and finds it insufficient to account for all of Sabom's results. Most of the remainder of this chapter consists of a straightforward discussion of a variety of paranormal effects that other researchers have reported in connection with or in the aftermath of NDEs. Rogo concludes with an intriguing interpretation of his own for the apparent increase in psychic sensitivities following NDEs.

The stage is now—finally!—set for Rogo's own general interpretation of NDEs, which he sets forth in his last two chapters. Here he distin-
guishes between what he calls simple and eschatological NDEs. Simple NDEs are essentially simple OBEs, which, after reviewing principally the OBE research carried out in the mid-seventies at the Psychical Research Foundation in North Carolina, Rogo concludes represent genuine (i.e., literal) separations of consciousness from the body. The OBE, then, is the real experiential foundation of the NDE—and so we see why it was necessary—if perhaps ultimately circular—for Rogo to define NDEs as he did in the beginning of his book.

The OBE makes possible, however, a second visionary component that gives rise to the eschatological NDE, or what Zaleski has, with a disdain for unnecessary jargon, simply called "the otherworld journey." This more transcendental aspect of the NDE is a mixture of both objective and subjective elements and is overlaid with symbolic meaning. In Rogo’s view, the eschatological NDE signals the existence of a spiritual Beyond and implies survival of bodily death. As such it is a realm that has of course been apprehended in many other ways than through an NDE—as the world’s treasury of spiritual and religious literature discloses.

On these matters, Rogo’s thinking is very close to my own; accordingly, it will not surprise you to learn that I find his interpretive commentary not merely cogent but compelling and a fitting conclusion to his inquiry into the nature of the NDE.

So this, then, is the gist of what you will find in Rogo’s rewarding book.

What will you not find?

Well, you won’t find much about much about the transformative effects of NDEs and you will find nothing at all on their possible evolutionary implications. These are major themes in the work of NDE authors such as Flynn, Grey, Michael Grosso, and Ring, but Rogo’s own concern with the NDE is tightly focused on what it is and its implications for survival—not what it does or may mean in the larger worldly scheme of things.

Similarly, you won’t find any material describing NDErs’ difficulties in coming to terms with these experiences afterward or with the personal and interpersonal dislocations they set into motion. These “applied” issues are likewise far from Rogo’s sphere of interest in NDEs.

Finally, I don’t think you will sense from this book that Rogo himself, despite his evident and wide-ranging knowledge of NDEs, has a good “feel” for NDErs themselves. My impression is that he has relied more on second-hand written accounts of these experiences than first-hand contact with NDErs. This is a book that, at least to me, reflects an
effort at intellectual rather than empathetic understanding of the NDE. On its own terms, it is very successful and most worthwhile; but its own terms can offer the basis only for a partial understanding of the phenomenon Rogo seeks to elucidate. It is for this reason that I would recommend coupling this volume with Moody's first book for anyone just getting acquainted with the NDE.

I've saved my most niggling criticism for last. Unfortunately, Rogo's book betrays signs both of highly selective reading in near-death studies and of carelessness (or haste) in composition. For example, he spells Elisabeth Kübler-Ross's first name incorrectly (with a z); he gets David Bohm's last name wrong; he has Craig Lundahl at Eastern (instead of Western) New Mexico University; he botches the name of *The American Journal of Diseases of Children*; and so on. Only a pedant would care, of course, but we professors love to brandish our red pencils whenever we get the chance. One hopes these and other errors will be corrected in a re-titled American edition.

My final comment, however, would be to ask you to value my praise more than my cavils. For all its minor flaws, questionable statements and regrettable omissions—not to mention (again!) its inept title—this most welcome book is unquestionably a major contribution to the field. We should feel darn happy to have it and lucky that Scott Rogo took the trouble to write it. Frankly, I don't know of anyone who could have done it better.

**References**


Letters to the Editor

Consciousness and Substance: The Primal Forms of God

To the Editor:

In his Guest Editorial in Volume 6, Number 3 of this Journal, John White (1987) has warned seekers of enlightenment about what they should not do, but has not said what they should. I wish he had.

Another matter to which I wish to draw attention is his statement, citing Da Love-Ananda, that there is a nonphysical reality (Being or God) that is uncaused and infinite and is the source of all that there is.

How can we be sure that this is a fact? White has not tried to substantiate his observation. But in the major Hindu philosophical systems, with which he seems to be familiar, there are several arguments in favor of it. One may be cited. Stated briefly, we can know the world of objects only through the responses of our senses to them. Said another way, all the qualities of whatever we perceive are our "creations." So, if we can know the world of objects by some means other than the senses, we shall be able to perceive it in its "pure state," without any qualities, the "reality behind appearance." This is called "direct" or "unmediated" knowledge.

A technique that all the major schools of Hindu philosophy recommend for the purpose of obtaining direct knowledge is the practice of yoga as systematized by Patanjali (Bernard, 1958). As can be seen from some of the procedures described by him, particularly withdrawal of the senses (pratyaahara), concentration (dharana), and contemplation (dhyana), they are aimed at reducing or helping the practitioner to ignore, to the extent possible, the input of information to the brain from internal and external sources: physical sensations, thoughts, imagery, out-of-body experiences, and so on.

If the practitioner succeeds in this effort, what follows, stated briefly and simply is this: as one is not conscious of events in the physical environment nor of psychological events, one loses awareness of the passage of time. In other words, time stands still for the practitioner.
(In the Hindu philosophical tradition it is held that the notion of time derives from the awareness of succession of events.) Further, with no awareness of any mental or physical objects, including one's own body, the practitioner has no sense of a boundary that separates him or her from the environment.

This experience is sometimes described in terms such as being infinite, merging with the cosmos, or losing distinction between self and nonself. The practitioner feels he or she is fully conscious but, paradoxically, not aware who is the subject or what is the object in this state of consciousness. "Pure consciousness," "unconditional being," and "existence without qualities" are some of the terms used in attempts to describe this state of consciousness. The practitioner feels he or she just is, or is just "being." In the technical terminology of Patanjali's yoga, it is the ultimate state of contemplation (samaadhi).

Interestingly, many experiencers, though not all, when they try to describe this experience, which I shall henceforth call mystical experience, give the impression that it has a quality of radiance. A common image used is "a thousand suns." White himself refers to the Self = Being = Ultimate Reality as the "Radiant Transcendental Being" (White, 1987, p. 75). Could the bright light reported by many near-death experiencers be a variant of this phenomenon?

Now, how does one ascertain that "pure being" is indeed the ultimate reality and not a unique kind of hallucination (Bharati, 1977, p. 84), or a hallucination of radiance? I submit that this possibility has to be considered, since the brain, when starved of input, is known to respond in different ways, one of them being creation of its own input in the form of hallucinations.

No doubt a number of people who have had the mystical experience have said that they felt utterly convinced that "pure being" is the ultimate reality and they were identical with it. But conviction alone does not necessarily imply truth; their conviction may have been the result of their belief or expectation.

I say this on the basis of my own mystical experience. It occurred about five years ago, out of the blue, without my working for it, and it was a full-blown one. I have since deeply thought about its alleged metaphysical implications, but I find no reason to think that it is anything more than an exceedingly delightful experience. It gave me an idea of what is sought to be conveyed by the term "unconditional being," but I do not think I can make any ontological claims on the basis of my experience. There are other experiencers who hold the same opinion. A notable example is Agehananda Bharati (1977). He has also cited some ancient Hindu and Buddhist teachers in support of his view.
Several experiencers have observed that their mystical experience has brought about a positive change in their life attitudes, such as a reduction of materialistic concerns or a decrease in the fear of death. It may be asked why such transformations follow upon the mystical experience if there is nothing special about it. But do positive changes always occur? It seems that they do not (Bharati, 1977). When they do take place, I think one reason may well be the belief or expectation of the experiencer that change will follow. As is known from evaluative studies of the effects of transcendental meditation, for example, belief and expectation are powerful factors capable of modifying behavior (West, 1986, p. 249).

It is also possible that the mystical experience, particularly if it recurs several times, and the procedures such as meditation prescribed for achieving it, may cause modifications in body chemistry as well as in other respects (Mandell, 1980), and thus effect deep-rooted behavior changes. It seems to me that few subjects of the mystical experience, or writers on the subject, have given any thought to this factor. I would suggest investigating the value changes reported by near-death experiencers in this light.

Finally, assuming that there is an ultimate reality of the kind reported by subjects of the mystical experience, why is it spoken of in reverential terms? If the ultimate reality were to be discovered in the physicist's laboratory, would it be regarded in the same way?

References


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To the Editor:

Readers of this Journal are all quite familiar with the concept of the near-death experience (NDE) of an individual, which has been so eloquently developed by Raymond Moody, Kenneth Ring, Michael Sabom, and others. In Heading Toward Omega, Ring (1984) expanded the concept of the NDE of an individual to considering the near-death experience of the planet, drawing on the works of Pierre Teilhard de Chardin, Peter Russell, John White, and others.

To be sure, Ring applied his own original NDE research to this concept, and as far as I know, he was the first to articulate clearly the thesis of a planetary NDE. Michael Grosso's work, The Final Choice (1985), gave support to Ring's proposition. With that as a preface, let me now switch to applying the concept of the NDE to another level.

I live and work in Montana, a state with a relatively large Native American population. When first coming to Montana State University in 1975, not being Native American myself but having Native American students in my classes, I decided I needed to know more about the history of peoples native to the continental United States. I immersed myself in the writings of Dee Brown, Mari Sandoz, John Neihardt, and others.

This academic quarter (Fall 1989) I am giving my undergraduate near-death experience course for the second consecutive year. In discussing class projects with one of my students, I hit upon the idea of the NDE of a culture. It occurred to me that, based on my knowledge of Native American history and based on my experience living in Montana for the past 14 years, at least some of the Native American groups have undergone something akin to an NDE.

These groups were brought to the brink of extinction (some beyond) and, in a sense, left for dead by the United States Government of the late 1800s and early 1900s. It was not unlike a clinical cultural near-death, with the "heartbeat" of the tribe stopping and the "breathing" of the group coming to a halt.

As the resuscitation process has taken place over the last several decades, it would seem that some groups may have had what some would describe as a negative NDE. These groups have high rates of alcoholism, the fetal alcohol syndrome, physical violence, and unemployment. Other groups may be having the more typical positive, transcendental "core" experience in which there is a revival of tribal autonomy, a resurrection of the Native language, and a restored and keen interest in returning to the "old ways."
Therefore, it seems possible to me to speak not only in terms of an individual's NDE or the NDE of the Earth, but also in terms of a culture's NDE. We could look to other cultures and other times for additional examples of cultural NDEs, such as the Jewish people of World War II Europe.

As I ponder the idea of a cultural NDE, I can't help but wonder whether the mainstream American culture is presently undergoing its own NDE. Where are we with respect to Ring's five-stage model and its concomitant positive aftereffects? Or is it more the case that the American culture is in the throes of what some would call a negative NDE?

References


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Announcement

IANDS International Conference  
August 16–19, 1989

The International Association for Near-Death Studies (IANDS) will hold its first International Conference August 16–19, 1990, at the Georgetown University Conference Center in Washington, DC. For further information, write to:

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THE JOURNAL OF NEAR-DEATH STUDIES encourages submission of articles in the following categories: research reports; theoretical or conceptual statements; papers expressing a particular scientific, philosophic, religious, or historical perspective on the study of near-death experiences; cross cultural studies; individual case histories with instructive unusual features; and personal accounts of near-death experiences or related phenomena.

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 ½ x 11" white pages. Send manuscripts to: Bruce Greyson, M.D., Department of Psychiatry, University of Connecticut Health Center, Farmington, CT 06032.

TITLE PAGE should contain the names of the authors, as well as their academic degrees, affiliations, and phone number of senior author. A name and address for reprint requests should be included. A footnote may contain simple statements of affiliation, credit, and research support. Except for an introductory footnote, footnotes are discouraged.

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.

ILLUSTRATIONS should be self-explanatory and used sparingly. Tables and figures must be in camera-ready condition and include captions.