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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

We open this issue of the Journal with a Guest Editorial by Leon Rhodes, Editor of IAN DS' newsletter Revitalized Signs, on the dual aspects of the NDE as a public phenomenon taking its place in American culture and as an intensely private experience.

This issue also includes three empirical studies. Sociologist Allan Kellehear and psychologist Harvey Irwin report a study of Australian beliefs and expectations of the first five minutes of postmortem existence, and compare those findings with descriptions of NDEs. Health scientists William Serdahely and Barbara Walker describe and explore the implications of an NDE experienced by a man born without the ability to talk or to control his limbs. Psychiatrist Nathan Schnaper and social worker Harriet Panitz propose physiologic, pharmacologic, and psychologic etiologies for NDEs, based on their interviews with resuscitated patients, and suggest further research that might lead to better clinical care for these patients.

This issue also includes an historical overview of near-death research by Walker and Serdahely, and a book review of physicist Stephen Hawking's A Brief History of Time, in which Serdahely explores the implications for near-death research of Hawking's theoretical interpretations of the universe. Finally, we end with a letter from V. Krishnan challenging social scientist Roger Cook's theory of death, as put forth in Cook's Guest Editorial of last year, and a letter in response from Cook.

Bruce Greyson, M.D.
Guest Editorial

The Near-Death Experience: Private or Public?

Leon Rhodes
International Association for Near-Death Studies

ABSTRACT: This editorial contrasts the private, personal near-death experience with the public concept of the experience, and finds important messages for humanity that are common to both.

It would be difficult to think of an experience that is more private, secret, and personal than that brief, dramatic opening of nonphysical eyes to another realm of consciousness. Yet the near-death experience (NDE) is unquestionably of worldwide interest, affecting the human understanding of our existence, and changing fundamental beliefs about the meaning and purpose of life.

The existence of organizations to study and to make use of the near-death experience raises the very pertinent question of how the private experience and the public perception of the NDE overlap. If we begin with the NDEs of individual humans, we are dealing with a phenomenon that is ineffable, as well as intimately personal in its effect on a particular individual at a particular moment in time. It is true that the popularization of the NDE resulting from Raymond Moody's bestseller and the subsequent books, articles, studies, television and radio shows, and public programs actually is based on these very short moments...
that cannot be described, evaluated, or understood by anyone else. The accumulation of NDE accounts from countless individuals, however, has created a model of the near-death experience for humanity as a whole, with each experiencer having a few or perhaps many of the distinct elements including the out-of-body experience, the tunnel, the being of light, the beautiful realm, meeting departed loved ones, the life review, the "barrier," and the choice to return to unfinished obligations.

That is a sort of public NDE that belongs to all people, whether or not they have personally undergone the experience, and the two dominant results for the experiencer—the belief in a higher realm of consciousness and the loss of fear of death—are already being transmitted to a great many people who have not personally come to that verge of bodily death. But there are other consequences of the NDE for both the individual and the general public. Since it is likely that most of these have not yet been seriously studied, yet they are probably more important than the experience itself, it would be useful to consider the effects of the NDE on the experiencers and on their family and friends, and then try to evaluate the meaning of the NDE as a powerful and beneficial awakening to a new way of thinking for our times.

In a somewhat remote way we might compare the "discovery" of the NDE to the dawning of the realization that our world is a round globe, that the tiniest bits of matter are composed of countless molecules and atoms, that all around us are unseen, unfelt, and incredibly useful fields of energy only discovered within our century. Each of these, as well as other concepts now widely accepted, marked the beginning of a new understanding of our universe and ourselves.

Before I proceed, it is useful to note that the private versus public NDE question can be applied to the organizations devoted to exploring this fascinating subject. The private side of the NDE may include an experiencer's relationships with a very small number of persons, a spouse, good friend, or relative. It might include a trusted clergyman who seeks to reconcile the experience with the person's religious beliefs, and possibly a psychologist or doctor who can deal with the NDE from a professional background. It would include the sometimes difficult adjustments of the experiencer and his or her family.

The private aspects of the NDE may be encountered in a small "Friends of IANDS" chapter that meets regularly to allow experiencers to talk about their NDEs with other experiencers or others interested in the experience, or a support group to reassure and strengthen the experiencers or their spouses who are unable to deal with this amazing happening. Such relationships may not include much more than comparing the experiences, noting differences and similarities, or probing
more deeply into the memory of the NDE and discussing its implications and consequences. Valuable friendships can come about and many “problems” ameliorated in the small group, networking, or counseling relationship.

These benefits, no matter how desirable, would not justify the sort of organization represented by the International Association for Near-Death Studies (IANDS). IANDS was organized in 1981 under the direction of Kenneth Ring to be primarily a research group of scientists and professionals such as doctors, psychiatrists, and psychologists committed to analysis of the NDE as reported by experiencers, using the scientific method. Researchers have attempted to both verify and give deeper understanding to experiences never before evaluated by scientists: a higher level of consciousness; a spiritual encounter with a very different world; a beautiful, loving existence in striking contrast to the conditions of a near-fatal injury, a lethal heart attack, or a deadly reaction of the physical body to some disorder.

This public aspect of the NDE suggests very different considerations. First of all, although it is compiled from the private accounts, it must be removed from the individual, except, perhaps, to classify experiencers into categories, so that even those fascinating details of the NDE become impersonal and almost abstract. What we identify as the public near-death experience should, as far as possible, apply to all experiencers, rather than to the 26-year-old mother of three with severe asthma problems, or to the salesman whose car plunged over an embankment on a rainy night.

This can in no way confine the NDE to a narrow event free from amazing and surprising exceptions. However infrequent these specific examples, the NDE must have parameters that include seeing a family pet, noticing that Uncle Jason now wears a robe in that beautiful realm, smelling Grandma’s perfume, or dying children not having a “life review.” It must include incredible variety yet somehow coalesce into a comprehensible universal NDE.

There are already so many books on the subject of the NDE that I find it easy to resist the temptation to write another, yet I have no doubt that large volumes could easily be written just to suggest the variety of the near-death experience. But there is a message when we consider the question of how the private NDE differs from the public concept of what happens at death. The private, personal NDE provides all the information needed for individual experiencers to reevaluate their lives, shift their perspectives, and recognize new values. From that amazing moment, they have a greater understanding of themselves.
In a corresponding way, the public NDE, which never happened to any single individual, provides important guidelines to all those willing to recognize that the "crossing over" none of us can avoid is quite different from what has been supposed. What can we collectively learn from the public NDE? What is it that an organization like IANDS has to offer humanity at this point in time?

First of all, I would stress that we must not allow the NDE to be contaminated by a host of mystical experiences that are not part of the dying process. It is too easy to view the NDE as just another psychic or mystical event.

More important, we should recognize that the various elements of the NDE have some amazingly simple yet profound messages. Unquestionably, the universal public message (avoiding the so-called "negative" NDE) is that the dreaded moment of death is in all likelihood free of suffering, fright, or distress. Experiencers are astonishingly relaxed for the most part, accepting this unique adventure, though sometimes a bit bewildered. Awareness of this simple revelation by those who "have been there" should, in itself, be of tremendous significance to all of us.

Furthermore, the almost universal adjective used for the NDE is "loving," usually with "warm" included and even under dreadful situations, "pain-free" and "joyous." These simple ideas teach us much, especially that we are somehow loved, we are protected and, all appearances to the contrary, we are undergoing in dying an entirely normal procedure to advance our lives to a new level.

Surely a dominant feature of the NDE is the ineffable light. It is not a light to be confused with what we usually think of as light: daylight from the sun, spotlights, or something that hurts our eyes. Interestingly, it is contrasted to the familiar black, lightless tunnel. Would it be too presumptuous to suggest that we are here given a picture of a different kind of light, the light that illuminates the mind? And may the words "understanding" and "revelation" have something to do with this light and with that brilliant being greeting us? It seems somehow irreverent to ask who that being of light is. Identifications have been numerous: God, Jesus, Mary, an angel, my father, etc. Yet the quality of that being is consistently warm, wise, loving, kind, and reassuring. It is a guide, a helper, even when it tells us: "This is not your time."

What then is the message of that "realm" we enter? Experiencers struggle for words and settle for a few generalities, calling that realm "beautiful." What does this tell us? Think for a moment that we actually do not know why some things we see give us great pleasure. Other visions may be repulsive or of no significance, but the ability to
see, to sense and to react to beauty is an incalculable blessing. No matter what the scene left behind—the wrecked car, the unattractive hospital room, the battlefield, or the squalor of our lives—this "beauty" is awaiting us. The plain fact that we will still be able to take great pleasure in what we will experience is quite different from the traditional concept of an afterlife in a kind of limbo and ethereal vagueness. The NDE tells us that there is beauty awaiting us, and that we will find it exciting, thrilling, delightful.

What of those people we encounter? "Departed friends and loved ones" that we recognize are there to welcome us, frequently in ways that reveal to us things we could not have known. No need to go into the details; we are entering a realm that is full of loved ones. Do we need to know more? They calmly recognize us and make us feel at home. They convey ideas to us without the cumbersome mechanics of vocalization. Ideas tell us far more than words could possibly convey. Almost effortlessly we find that time and space are of no importance and that we are able to enter into a new kind of existence. May we not look forward with pleasure to an existence in which our ideas are not distorted by the limitations of language?

Two other elements of the NDE are worth considering: the life review and the "barrier" or "choice"—that is, the turning point when we elect to return. Vividly described life reviews are commonly reported but never adequately described, so instead of being concerned with the details of that panoramic, full-color, three-dimensional reliving of our lives, we can be content with the simple message that all that we have done, felt, thought, or even imagined stays with us. We will still be the person who has lived, loved, and learned in this physical world. Our years of existence are not wiped away but go with us to provide the building blocks for our future personality and relationships with others.

I conclude this essay with an attempt to evaluate the frequently reported awareness of a dividing line, be it a border, fence, wall, stream, invisible barrier, gate, door, or a being obstructing our passage. We go no further, but return to our bodies. Without understanding it further, cannot we accept the implication that this life is important, that we do have obligations and unfinished responsibilities? This is a public message for all of us, whether experiencers or not. It is not a private matter but a clue to how we are to live our lives and prepare for whatever is beyond.
**ABSTRACT:** This paper examines the beliefs and expectations that a sample of 508 people hold about the first five minutes after death. A substantial minority believed that they will experience the main elements of the near-death experience (NDE). In general these elements were cited more frequently than were Biblical images. Six percent of the sample said that postmortem survival for them will be a negative and disturbing experience. We discuss these results in terms of their methodological implications for other survey work and their theoretical contribution toward our understanding of negative NDEs.

What, if anything, do people believe about experiences associated with the first five minutes after their own death? This paper examines the nature of popular beliefs and expectations about the initial moments of postmortem existence. Studying beliefs about personal survival of death is relevant to near-death research for two reasons.

First, these beliefs may reflect aspects of socialization and social conditioning, which in turn may influence to some extent the content and nature of the near-death experience (NDE). For example, Calvin Schorer (1985–86) noted of native American NDE accounts that the panoramic life review is absent but traditional images such as the
flathead snake, the "war eagle," deer, moose, and bows and arrows are encountered. Dorothy Counts (1983) described an event within a Melanesian NDE in which a deceased acquaintance cut the leg of the NDEr and spat ginger on it. Counts noted that "spitting ginger on a wound is a traditional healing practice . . . thought to have great healing power" (1983, p. 119). Satwant Pasricha and Ian Stevenson (1986) noted several culture-specific features of their Indian accounts, including being "sent back" because of mistaken identity and the reading of the record of a person's life. However, they cautioned against the reductionist implication that these variations are purely a function of prior beliefs and socialization.

We should remember, however, that if we survive death and live in an afterlife realm, we should expect to find variations in that world, just as we find them in the different parts of the familiar world of the living. A traveller to Delhi encounters dark skinned immigration officials, who in many respects behave differently from the lighter skinned immigration officials another traveller may meet when arriving in London or New York. Yet we do not say that the descriptions of the first traveller are "real" and those of the second "unreal." (Pasricha & Stevenson, 1986, p. 169)

This caution notwithstanding, the observed cross-cultural variations in NDE content do prompt further empirical scrutiny of the possibility that the phenomenology of the experience is inspired to some degree by processes of social conditioning.

Another reason for exploring beliefs with respect to the NDE is that even if the relationship between social beliefs and the content of an NDE is causally ambiguous, social beliefs will nonetheless be important to the interpretation of the NDE by NDErs and their social network. For example, NDErs frequently depict elements of their NDE in terms of some aspect of their religious belief. Kenneth Ring (1980) reported cases where "the light" was described as a "vision of Jesus." Of course, it is not necessarily the characteristics of the phenomenon that are important for this identification but rather the NDErs' interpretation of what they believe they experience. Furthermore, not all NDErs will necessarily interpret their experience as a brief glimpse of the afterlife. The English philosopher Sir A.J. Ayers, in his much publicized account (1988) of his own NDE was happy to view that experience as a side effect of brain activity secondary to his cardiac arrest. Although in his view survival is a philosophic question worth entertaining, Ayers wrote that persistence of brain activity is by far the "most probable explanation." This is a similar interpretation to that
taken by some respondents in a Chinese survey (Kellehear, Heaven & Gao 1990). Of the 26 respondents who claimed to have had an experience similar to the NDE described in that survey, only 6 chose to construe it as evidence of life after death. It is within the context of these issues and possibilities that the present study is set.

Background to the Study

In 1987 Harvey Irwin examined stereotypical images of heaven and compared these with the common images and experiences reported in NDEs. Past surveys had given little attention to beliefs about the appearance of the afterlife environment and that confined the area to speculation. In the Irwin survey questionnaires were distributed to 96 university students. They were asked to take an imaginary tour through heaven and check off any statements on the survey form that fairly represented their impressions. The survey covered four areas: the physical appearance of heaven, beings that might be encountered, the major mode of travel, and the sounds one might hear in that environment.

There were several features in that survey that limit any subsequent comparison with its findings and the NDE. First, a study of the beliefs of the afterlife might not necessarily indicate beliefs about the first five minutes of after-death experience. Indeed, theologian John Hick (1976) rightly identified eschatology as the doctrine of last things or of the ultimate state to which we are destined. He used the term par-eschatology to designate the doctrine of next-to-last things or the "human future between the present life and Man's ultimate state" (Hick 1976, p. 22). It is pareschatological beliefs about the very next stage of existence beyond the present that we sought to examine here. This is important because people who believe in heaven may have a poorly developed idea of the experiential steps between this life and paradise. Conversely, people with beliefs about the experience of death itself may have poorly developed ideas about their ultimate destination and resting place in the "next world."

Second, Irwin's study employed a checklist of items developed from a pilot of 16 people. Checklists have the advantage of prompting poorly motivated respondents but they also restrict the potential diversity of images and experiences people may draw upon. In addition checklists, including those with token provision for answers not covered by the list, direct and channel respondents' thinking along set lines.

Finally, Irwin's study did not survey the emotional dimension.
Sights, sounds, encounters, and travel were explored in the imaginary trip through heaven, but feelings about being in heaven were not addressed. This is an important omission since the NDE is typically characterized by powerful positive or negative emotion.

The aims of this study, therefore, were to solicit beliefs and expectations about the first five minutes after death; to conduct this study by using a semistructured instrument; and to document and examine people’s beliefs and expectations about their own emotional reactions to this time.

The research was divided into two parts, which, for reasons of clarity and organization, are called Study 1 and Study 2. Study 1 documents beliefs about postmortem existence insofar as respondents in this study held them. Study 2 explores expectations about personal survival regardless of the beliefs held by those in this sample. The rationale behind Study 2 is the recognition that experiences might be shaped not only by beliefs but also knowledge. In this respect, NDEs also occur among those who do not believe in postmortem survival of any kind. Directing respondents to construct images of the afterlife, despite their personal beliefs, should tap this source of expectations.

**Study 1**

**Sample**

Two groups were surveyed for their beliefs about the first five minutes after their own deaths. The first group comprised 262 first year undergraduate students at an Australian university. There were 41 males, 219 females and two whose gender was not specified. The mean age was 21 and the majority of these students were studying social science (101) or nursing (137).

After the student survey, volunteers were requested to distribute questionnaires among the general population. This was the second group for the study (N = 72). Student volunteer survey assistants were asked to sample adults from the local community and to select from as broad a range as possible in terms of age and socioeconomic status. The sample was evenly divided between males (35) and females (35), with two whose gender was not specified. The mean age for this sample was 38. One respondent had achieved primary education level, 30 had achieved secondary level, 19 obtained secondary and further technical training, 17 had some level of university or college education, and 5 did
not specify educational level. The people in this sample came from a wide variety of occupations, ranging in occupational prestige scores from 2.4 to 6.6 with a possible range between 1.2 to 6.9 using Ann Daniel’s (1983) occupational prestige scale.

**Questionnaire**

Respondents were asked three questions. The first question was fixed choice and the others were open ended. Question 1 enquired about the respondent’s belief in survival in the first five minutes after biological death. Response options were “yes,” “no,” or “unsure.” If respondents answered “yes” to this question they were directed to answer question 2.

Question 2 was set in the context of their belief in surviving the first five minutes after death. Respondents were asked to complete four sentences. These were: “Within these very first moments, I believe I will see. . . .”; “I believe I will meet. . . .”; “I believe I will hear. . . .”; “Emotionally, I will feel. . . .”

Regardless of their answer to question 1, all respondents were asked to answer question 3, which asked them to identify the social influences they believed were important to the kind of answer they gave in question 1. Students were also asked their sex, age, and field of study. The community group were asked their sex, age, education, and occupation.

**Results**

The distribution of responses to question 1, on the belief of post-mortem existence, is presented in Table 1. The two samples differ in their distribution here ($X^2 = 13.96, df = 2; p < .001$). There is a trend

<table>
<thead>
<tr>
<th>Belief about surviving the first five minutes after death – Study 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong> ($N = 262$)</td>
</tr>
<tr>
<td>will survive</td>
</tr>
<tr>
<td>will not survive</td>
</tr>
<tr>
<td>unsure</td>
</tr>
</tbody>
</table>
for a substantial proportion of the student group, who are younger than the community group, to say they were "unsure" about postmortem experience. Perhaps as people grow older they take a more definite stance on this issue.

The believers, who responded "yes" to question 1 in the two samples (104 students and 33 members of the community sample), were asked what they believed they would see, meet, hear, and feel in the first five minutes of their postmortem existence. "Don't know, no answer" responses for the student sample ranged from 12% for one category to 31% for two others. The response of "don't know" was somewhat lower in the general sample, ranging from 3% for one category to 27% for another. The full range of generic responses is summarized in Table 2. The similarity between these responses and the usual elements of the NDE is notable. What believers declare they will see, meet, hear, and feel in the first five minutes after death tends to correspond closely to the typical NDE.

Believers (137) and nonbelievers (54) were asked to identify the likely sources of their beliefs. Their answers are summarized in Table 3. Although relatively few believers gave Biblical or heavenly depictions of the postmortem experience, a substantial proportion of believers cited the Bible and various forms of religious instruction as the alleged source of their beliefs. The sources of belief in the existence of an afterlife evidently are in some degree distinct from the sources of belief in the nature of the afterlife. Accounts of NDEs nevertheless represent another significant declared source of believers' understanding of postmortem experience. This is not surprising given that an estimated 72–79% of Australians are familiar with the NDE (Kellehear & Heaven 1989).

In both samples there is some tendency for nonbelievers to portray themselves as independent thinkers, claiming to form their attitude to an afterlife in terms of their own observations and logic rather than on the basis of other people's suggestions and influence.

Study 2

Sample

A second group of first-year undergraduate Australian university students was asked to complete a questionnaire concerning their expectations about postmortem existence, irrespective of their beliefs in
<table>
<thead>
<tr>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(N = 104)</strong></td>
<td><strong>(N = 33)</strong></td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td><strong>Community</strong></td>
</tr>
</tbody>
</table>

### I will see:
- **the immediate setting of death**
  - Study 1: 27 (26%) 8 (24%)
  - Study 2: 44 (25%)
- **lights**
  - Study 1: 23 (22%) 8 (24%)
  - Study 2: 44 (25%)
- **Biblical scene, heaven, etc.**
  - Study 1: 10 (10%)
  - Study 2: 0 (0%)
- **life review**
  - Study 1: 9 (9%)
  - Study 2: 1 (3%)
- **pastoral scene, paradise**
  - Study 1: 8 (8%)
  - Study 2: 3 (9%)
- **tunnel**
  - Study 1: 6 (6%)
  - Study 2: 3 (9%)
- **darkness**
  - Study 1: 6 (6%)
  - Study 2: 0 (0%)
- **don't know, no answer**
  - Study 1: 22 (21%)
  - Study 2: 3 (9%)

### I will meet:
- **deceased relatives, friends**
  - Study 1: 35 (34%)
  - Study 2: 9 (27%)
  - Study 3: 45 (26%)
- **God**
  - Study 1: 21 (20%)
  - Study 2: 13 (39%)
  - Study 3: 35 (20%)
- **unrecognized deceased people**
  - Study 1: 20 (19%)
  - Study 2: 4 (12%)
  - Study 3: 49 (28%)
- **angels**
  - Study 1: 6 (6%)
  - Study 2: 0 (0%)
  - Study 3: 9 (5%)
- **Jesus**
  - Study 1: 5 (5%)
  - Study 2: 0 (0%)
  - Study 3: 3 (5%)
- **deceased pets**
  - Study 1: 3 (3%)
  - Study 2: 0 (0%)
  - Study 3: 1 (0.5%)
- **don't know, no answer**
  - Study 1: 32 (31%)
  - Study 2: 9 (27%)
  - Study 3: 44 (25%)

### I will hear:
- **voices talking, singing**
  - Study 1: 25 (24%)
  - Study 2: 7 (21%)
  - Study 3: 28 (16%)
- **music**
  - Study 1: 17 (16%)
  - Study 2: 3 (9%)
  - Study 3: 30 (17%)
- **silence, no hearing**
  - Study 1: 14 (13%)
  - Study 2: 8 (24%)
  - Study 3: 47 (27%)
- **sounds of nature**
  - Study 1: 4 (4%)
  - Study 2: 1 (3%)
  - Study 3: 7 (4%)
- **don't know, no answer**
  - Study 1: 32 (31%)
  - Study 2: 3 (9%)
  - Study 3: 30 (17%)

### I will feel:
- **calmness, contentment, peace**
  - Study 1: 50 (48%)
  - Study 2: 22 (67%)
  - Study 3: 49 (28%)
- **happiness, joy, love, relief**
  - Study 1: 44 (42%)
  - Study 2: 14 (42%)
  - Study 3: 59 (34%)
- **fear, anxiety, awe**
  - Study 1: 11 (11%)
  - Study 2: 1 (3%)
  - Study 3: 31 (18%)
- **sadness, anger**
  - Study 1: 6 (6%)
  - Study 2: 2 (6%)
  - Study 3: 17 (10%)
- **don't know, no answer**
  - Study 1: 12 (12%)
  - Study 2: 1 (3%)
  - Study 3: 12 (7%)
such a possibility. Questionnaires were completed by 174 students. This brings the total number of people participating in the project to 508, with 436 of these being students. Although the majority of the respondents were students, the results nonetheless are relevant to a general study of beliefs and their relationship to the NDE. Mary Reardon Castles and Ruth Beckmann Murray (1979) argued that random selection has little meaning in the field of death and dying. The important issue is to identify clearly the population being sampled. No population should be less interesting or important than another where questions of death and dying are concerned. For instance, since there is no typical social profile of the NDEr, all populations should be equally relevant to study.

Table 3
Incidence of declared sources of belief—Study 1

<table>
<thead>
<tr>
<th>Source of Belief</th>
<th>Students Believers (N = 104)</th>
<th>Students Non-believers (N = 34)</th>
<th>Community Believers (N = 33)</th>
<th>Community Non-believers (N = 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible, religious education</td>
<td>35 (34%)</td>
<td>2 (6%)</td>
<td>17 (52%)</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>NDE accounts</td>
<td>24 (23%)</td>
<td>1 (3%)</td>
<td>8 (24%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>fictional books, movies</td>
<td>15 (14%)</td>
<td>5 (15%)</td>
<td>1 (3%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>nonfiction books</td>
<td>15 (14%)</td>
<td>6 (18%)</td>
<td>5 (15%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>family</td>
<td>22 (21%)</td>
<td>9 (26%)</td>
<td>6 (18%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>friends, groups</td>
<td>16 (15%)</td>
<td>5 (15%)</td>
<td>6 (18%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>another's death</td>
<td>5 (5%)</td>
<td>2 (6%)</td>
<td>2 (6%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>own ideas, logic</td>
<td>16 (15%)</td>
<td>8 (24%)</td>
<td>3 (9%)</td>
<td>10 (50%)</td>
</tr>
<tr>
<td>don't know, no answer</td>
<td>20 (19%)</td>
<td>4 (12%)</td>
<td>3 (9%)</td>
<td>4 (20%)</td>
</tr>
</tbody>
</table>
There were 57 males and 113 females who participated in Study 2, and 4 persons whose gender was not specified. The majority of these students were studying social science (148). The mean age was 20.

**Questionnaire**

The format and design of the survey instrument was identical to that described in Study 1 except for one detail. After question 1 concerning belief in postmortem existence, all respondents were asked to answer question 2 and 3 regardless of their beliefs. They were asked to imagine they actually do survive and to answer questions about what they might actually experience in that eventuality.

**Results**

For this sample the distribution of responses is shown in Table 4. Comparison of these data with those from the student sample in Study 1 indicates a highly significant difference ($X^2 = 35.56$ df = 2; $p < .001$). There may be several explanations for this discrepancy. The two student samples may genuinely have differed; that is, rather different student populations may have been tapped in Study 1 and Study 2. For example, a unique feature of the sample in Study 1 was the large group of nursing students. On the other hand, there may have been a factor working against students' candidness in the earlier belief survey. In Study 1, respondents who acknowledged postmortem belief then had to give details about several aspects of that belief, whereas those who were unsure about their belief were not required to do so. In Study 2, on the other hand, all respondents were required to describe their expectations for facets of postmortem experience. There may have been a temptation for less motivated believers to claim to be unsure about

<table>
<thead>
<tr>
<th>Belief about surviving the first five minutes after death—Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students (n = 174)</strong></td>
</tr>
<tr>
<td>will survive</td>
</tr>
<tr>
<td>will not survive</td>
</tr>
<tr>
<td>unsure</td>
</tr>
</tbody>
</table>
their belief, thereby avoiding the time consuming task of answering question 2.

In Study 2, some 25–45% of nonbelievers insisted that they did not know what to expect of various facets of a postmortem existence. This necessarily dilutes the incidence of specific expectations in comparison to that of believers' views in Study 1. While the lack of response among nonbelievers might be taken to signify an implacable determination not to countenance the notion of an afterlife, it might also reflect some nonbelievers' selective avoidance of, and lack of exposure to, social input about postmortem existence. In other words, there may well be good reason for their apparent ignorance of socially propagated expectations about the afterlife.

The expectations of postmortem experience within the complete sample for Study 2 are summarized in Table 2. Taking due account of many nonbelievers' lack of contribution to the above data, the table again documents the extent to which people's views of the first five minutes of postmortem experience accord with the NDE.

There are no major discrepancies between the overall patterns in these data and those of Study 1. Perhaps the emotional response of calmness is rather lower in people's expectations than in people's beliefs. Again, given the earlier consideration concerning the disparity between the two student samples, the interpretation of this difference is unclear.

The declared sources of expectations in Study 2 are summarized in Table 5. These data suggest that whereas all categories of respondents were able to use their religious education as a basis for generating their expectations, NDE accounts were a source of expectations solely for the believers. Perhaps because childhood religious education could not generally be avoided, believers and nonbelievers alike were able to draw on this information in conceptualizing a postmortem experience. Accounts of NDEs, however, can be avoided to some extent. We can decline to read the book about NDEs, we can turn off the TV documentary, and we can flip past the magazine article. Not only are nonbelievers able to avoid information on NDEs, they can selectively fail to memorize such information to the extent that they are exposed to it. Even if they sat through a segment of a television program on the NDE, the program's content would be recognized as incompatible with their beliefs and soon forgotten. In other words, because of nonbelievers' perception of the NDE as uninteresting, they genuinely may be unable to recall this material when faced with a question about the nature of a hypothetical afterlife.
Table 5
Incidence of declared sources of expectation—Study 2

<table>
<thead>
<tr>
<th>Source</th>
<th>Believers (N = 112)</th>
<th>Nonbelievers (N = 27)</th>
<th>Unsure (N = 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bible, religious education</td>
<td>32 (29%)</td>
<td>5 (19%)</td>
<td>8 (23%)</td>
</tr>
<tr>
<td>NDE accounts</td>
<td>25 (22%)</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>fictional books, movies</td>
<td>26 (23%)</td>
<td>9 (33%)</td>
<td>20 (57%)</td>
</tr>
<tr>
<td>nonfiction books</td>
<td>15 (13%)</td>
<td>2 (7%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>family</td>
<td>9 (8%)</td>
<td>2 (7%)</td>
<td>4 (11%)</td>
</tr>
<tr>
<td>friends, groups</td>
<td>8 (7%)</td>
<td>3 (11%)</td>
<td>5 (14%)</td>
</tr>
<tr>
<td>another's death</td>
<td>1 (1%)</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>own ideas, logic</td>
<td>13 (12%)</td>
<td>7 (26%)</td>
<td>4 (11%)</td>
</tr>
<tr>
<td>don't know, no answer</td>
<td>18 (16%)</td>
<td>7 (26%)</td>
<td>4 (11%)</td>
</tr>
</tbody>
</table>

The inclination of nonbelievers to depict themselves as immune to social influences is again evident in this sample.

Discussion

In both studies there is a substantial minority of people who believe that they will experience elements of the NDE in the first five minutes after death. Generally these elements are cited more frequently than Biblical images. This is strong indication that accounts of NDEs have made a powerful impact on the community in general and the young student population in particular. This trend parallels those found by Allan Kellehear and Patrick Heaven (1989) and Barbara Walker and Robert Russell (1989) in their survey work. It cannot be concluded, of course, that actual NDEs are inspired by the publicity given to previous cases. After all, NDEs are known to have occurred prior to the wide and popular coverage of them. Our data nevertheless are by no means incompatible with the hypothesis that the NDE itself could be molded to some degree by socially propagated beliefs and expectations.

It is noteworthy also that the students who believed they will see a Biblical or heavenly setting did not report a belief they would see the immediate setting in which they die. These two beliefs form the basis of two quite separate sub-groups of the sample ($V^2 = 3.84$, df = 1; $p < .05$; where $V^2$ is $X^2$ corrected for sample size [Rhoades and Overall, 1982]). This supports the methodological importance of differentiating
between pareschatological beliefs and eschatological ones. Although studies that focus only on beliefs about heaven or hell are useful in exploring the imagery people may use, any such survey might also artificially exaggerate the differences between popular belief about postmortem existence and images of the NDE. Such observed differences might also merely reflect the fact that images of NDEs relate specifically to a short period after death.

The belief in meeting deceased pets was uncommon but nonetheless confined to the student sample. Possibly because the students were young a pet may have been the only deceased entity known to some of them. In this regard, it may be noted that pets are an (also infrequent) element of children's rather than adults' NDEs (Irwin, 1989).

Of some interest too is the finding that a small proportion (approximately 6%) of the total sample of 508 respondents reported that they believe they would be frightened or anxious five minutes after death. For example, one student was unsure whether he would see God or Satan, heaven or hell, but described only one way he might feel: "emotionally distressed." Another student described her first five minutes in "a barren, futile land" where she might meet "another spirit or alien." She would be "unnerved" and "disillusioned." A businessman from the community sample described his belief about the first five minutes after death as finding himself "in a kaleidoscope of colour, moving in random swirls like a mist." He would be unable to recognize anyone and his experience would be "a confused picture, as in a dream." There would be a "confusion of sound, voices, nothing distinguishable—not musical." He would feel, understandably, "insecure, disorientated." Other students in this group described their feelings as "lost," "afraid," "frightened," "confused," "upset," and "scared." Two observations may be made about these responses, one methodological and the other theoretical.

Methodologically, these results show the importance of surveys of belief to be semistructured and to explore the emotional dimension of beliefs. George Gallup (1982), in his national U.S. survey, for example, failed to establish that negative emotions are part of some people's view of the afterlife. Although Gallup identified beliefs in hell, for example, and found some respondents who believed they might be bound for this place, a subsequent checklist did not canvass for beliefs about the nature of hell nor feelings about this (Gallup, 1982). The 13% of the sample who rejected all offered statements concerning their beliefs about life after death may disguise the group who believe such a prospect could be negative and frightening to them.
On a theoretical level, the reports of negative emotions from some of our respondents have implications for the psychology of dying. We cannot claim that the negative beliefs expressed by our respondents are the fundamental cause of negative NDEs. Indeed, it remains to be determined precisely how, if at all, the content of the NDE is socially influenced. Nevertheless, while beliefs might well influence NDE content they most certainly do influence experiencers' interpretations of their NDEs. In the latter respect, if people with negative emotional beliefs about survival actually do find themselves conscious "five minutes after death," their experiences might be viewed at the time or subsequently as disturbing irrespective of their content. If NDEs are commonly encountered by the dying, prior beliefs and expectations could be important as to whether the experiences are interpreted in comforting or disturbing ways. Perhaps this is part of the reason why so many religious and cultural prescriptions for dying conduct emphasize the importance of positive attitude and equanimity in the face of impending death.

The possible roles of social conditioning in the nature of and the experiencer's interpretation of the NDE warrant further investigation. There is a cogent case for such research to be undertaken in societies that have been little exposed to the publicity over NDEs characteristic of Western societies.

References


The Near-Death Experience of a Nonverbal Person with Congenital Quadriplegia

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Barbara A. Walker, Ph.D.
Eastern Illinois University

ABSTRACT: This article describes the near-death experience (NDE) a 39-year-old man born with severe spastic quadriplegia had when he was two and one-half years old. Nonverbal because of cerebral palsy, the man was able to communicate about his experience after he heard a therapist talking to another person about NDEs. The man experienced a fairly typical NDE and has had seven subsequent out-of-body experiences, the latter hypothesized as temporary relief from his physical pain resulting from muscular spasticity.

In the fall of 1987, the senior author interviewed an eight-year-old boy who had a near-death experience (NDE) when he was seven (Serdahely, 1989-90). Because of the paucity of pediatric cases in the NDE literature (Morse, 1983; Morse, Castillo, Venecia, Milstein, and Tyler, 1986; Morse, Conner, and Tyler, 1985), a solicitation for pediatric near-death experiencers (NDErs) was placed in various periodicals. With the exception of one pediatric respondent, this inquiry produced several accounts from adults of their childhood NDEs. One of these retrospective accounts was most unusual, and it is this NDE to which the remainder of this paper is devoted.

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This respondent, whom we shall call Stuart, is 39 years old at the present time, and has been challenged since birth with cerebral palsy. He is able to understand what is said to him at a high receptive level but is unable to speak. However, Stuart can make intelligible sounds for "Yes" and "No," and has gone to great lengths to communicate. His health care providers say he uses his normal intellectual capacity in "unusual [i.e., extraordinary] ways."

He was also born with severe spastic quadriplegia, a painful condition that left him with little mobility and limited physical abilities. His caregivers note his remarkable motivation to overcome his physical challenges. He is able to use a chin switch to operate a computer, thereby allowing him to communicate through the use of pre-programmed messages and "Yes/No" responses as guided by others. Recently, his occupational therapist has devised a unique computer program for Stuart. He can write original sentences with personal messages through the use of adapted software that translates numbers and Bliss symbols into English.

Methodological Limitations

While Stuart was questioned closely about his NDE through the use of "Yes/No" questions, as with all near-death experiencers we are ultimately left with trusting that the respondent has recalled the experience accurately and transmitted the experience faithfully to the researcher. It is, of course, possible that a childhood NDE could be reinterpreted in light of later events in the childhood, adolescent, or adult years.

While we can never be completely certain of the accuracy of any case, we can take some measure of assurance given the following. First, we know that children who have NDEs report patterns and motifs very similar to those reported by adults recalling their childhood NDEs (Bush, 1983; Morse, Conner, and Tyler, 1985; Serdahely, 1989–90). Second, it is well established that while a particular cultural or religious background may influence the interpretation of an NDE, the basic event or phenomenon seems to remain constant regardless of culture or religion (Ring, 1980). So in the end, we as near-death researchers are left with a subjective impression of the veracity of the respondent, unless obvious inexplicable disparities occur in the respondent's testimony. Such was not the case with Stuart.

Critics of near-death research often ask how we know a person is not making up this experience or just describing something about which
he or she has read. We know that Stuart's descriptions are not the result of his reading about NDEs because he cannot read. Of course, it is possible that Stuart could have viewed television programs on NDEs, heard radio shows, or listened to someone read aloud about NDEs. However, we asked Stuart if any other these possibilities were the case, and he replied in the negative.

Stuart's NDE

In the fall of 1988, in Stuart's presence, his occupational therapist was comforting a person who had recently lost a loved one. Audrey, the therapist, had a copy of Raymond Moody's *The Light Beyond* (1988) and was citing information from the book in an attempt to console that person. She was telling the grieving person about NDEs and how pleasant NDErs report dying seems to be. As Audrey was describing parts of that book, she noticed Stuart had become excited and enthusiastic. Through a series of questions, she ascertained that Stuart had had an NDE when he was two and a half years old, and because of his speech limitations, he had had to wait almost 37 years to communicate about his childhood NDE.

According to information supplied by Stuart's adopted mother, when he was two and a half he was very ill. A precise diagnosis of the illness was never made, but Stuart was said to have had a high fever, increased spinal fluid pressure, and muscular contractions with increased spasticity. It was during that period of illness that Stuart had his NDE. The memories of his NDE remain vivid, even though almost 37 years have elapsed since his near-death experience. Stuart had what Kenneth Ring would classify as a Stage 5 NDE (Ring, 1980).

During his NDE, Stuart felt peaceful and had no pain. He had a out-of-body experience (OBE) during which he was able to look down upon his body and the doctors and nurses ministering to him. He did not recognize his body at the time of his OBE. Stuart's NDE did not involve going into a tunnel or a darkness. Instead, he found himself in a misty, bright, and narrow stairway with steps. The end of the stairway was very bright, and there Stuart had a sense of being loved. However, he was quite sure the bright light at the stairway's end was not God.

While he was in the light he did not see trees or lakes, but he did hear "heavenly" music. He also saw about 20 spirits whom he did not know and who did not communicate with him. These spirits were not people close to him (i.e., they were not deceased friends or relatives), but they did make him feel welcomed and loved. He also saw a border around
the place in which he found himself. The border had a gate that one could pass through. Stuart felt that if one went beyond the border, one would not return to one's body. He could see people on the other side of this border.

Time did not exist in this place. An even brighter light appeared to Stuart, and he knew this light was "God." Communication between "God" and Stuart occurred through thought transmission. "God" told Stuart he had to go back to his body and he did not have a choice about returning, but He did not say why Stuart had to return to Earth. While in this "heavenly" place, Stuart saw the future. He saw himself able-bodied as a boy, as a teenager, and as an adult. (At first, Stuart seemed to be indicating he saw himself in the future on Earth, in perhaps a future incarnation, but after further questioning, it seemed he might be talking about a future life in heaven.)

During the time Stuart was out of his body, he had mobility, and was able to float wherever he wanted to go. He remembers seeing and being able to move his hands and arms, but not his legs and feet.

Stuart has had two main aftereffects of his NDE, which relate well to Ring's (1984) findings on aftereffects of NDEs. First, Stuart has no fear of death. As a result of his NDE, he believes there is no such thing as death and that we continue on as "spirit" persons. The second aftereffect is a series of out-of-body experiences subsequent to his NDE. Stuart has indicated that he had four OBEs before he was 21 years old and three OBEs after that age.

During some of his OBEs, he would float up past the ceiling, over the metropolitan community in which he lives, and out into the sky. Sometimes he was met by Jesus, who was nurturing and loving to Stuart, and who embraced, held, and comforted him. It was during these times that Stuart was told he had two purposes for his life, one of which is that he has a message for people with disabilities and things to teach them.

In February 1989 Stuart had his sixth out-of-body experience. He indicated he went to "Paradise" while asleep and saw a glowing woman with a Scandinavian accent who had died a century ago. Stuart believed she was an ancestor of his, and he was thrilled at how loving she was. He also saw two deceased grandfathers who touched him, two deceased grandmothers, and two deceased stepbrothers. (His adopted mother confirmed that she had lost two sons prior to Stuart's OBE.) He also saw others there whose genders he could not determine, and indicated it was like a "big reunion." He also indicated he talked with God and Jesus, who encouraged him to write his autobiography to help others with handicaps.
Two lessons emerge from Stuart’s near-death experience and its concomitants. One lesson has to do with our bodies and our body images, and the other pertains to pain and being pain-free.

Stuart’s body is immobile and severely crippled because of quadriplegia. Just to communicate about basic needs, he has to use his chin switch to activate his computer program. And yet when he had his out-of-body experiences, including the one associated with his NDE, he was quite mobile and able to move his arms and hands freely and easily. It is interesting to note that during his OBE when he nearly died as an infant, he, like some other NDErs, did not recognize his body (Ritchie, 1978).

Phyllis Atwater (1988), in writing about her three NDEs, made the point that we are not our bodies. She likened the body to a jacket, which is discarded when worn out, an analogy made by Eknath Easwaran (1978) and other authors. Atwater believes, just as Stuart does, that the spirit body survives and continues after the physical body dies and deteriorates.

Stuart believes he was sent back to his infirm body with the mission of imparting a message to others with disabilities. But he also has a message for those who are able-bodied, a message that seems most timely and appropriate for a culture that so highly values youthfulness and promotes and sells so many products to "improve" our physical appearance.

It is our belief that Stuart’s message to able-bodied persons is that our bodies are an illusion and that who we are, just as who Stuart is, is far greater than the physical body. It is the consciousness or spirit, the energy that separates from the body during an OBE, that according to Stuart and other NDErs (Grey, 1985), never dies. Another of the senior author’s respondents, who has had approximately 50 OBEs, stated that the consciousness that separates from the body, compared to the body, is like the physical body compared to a toenail clipping.

Stuart, residing in a body so malformed, also has a corollary message for the able-bodied. That second message is nicely summarized in the psychological evaluation done on Stuart in August 1988, which reads, "Attempts should be made to desensitize peers to Stuart’s physical handicaps, and have them made known of what a wonderful and determined individual he is." In other words, for us nondisabled persons, the lesson is to look beyond the physical disabilities that can distance and separate us and to see the many things that can bring us together, the many things that other NDErs claim unite us, such as
our capacity to help others and to love one another unconditionally (Moody, 1988; Flynn, 1986).

The second major lesson of Stuart’s story relates to pain and pain relief. Stuart is frequently in a great deal of pain. At times during our conference telephone calls we would have to stop because he was in such great physical discomfort. We know that Stuart believes he has had at least seven out-of-body experiences since his NDE. These OBEs may provide some relief, albeit temporary, from the almost constant pain he experiences while he is in his body.

The pain relief Stuart received from his OBEs is not unlike the relief felt during the NDEs or OBEs of victims of sexual abuse or physical abuse (Serdahely, 1987-88). These victims report the OBE is a way of dealing with something quite painful and traumatic, and leaving the physical body temporarily relieves their terrible emotional and physical pain. NDErs have consistently reported that there seems to be no pain on “the other side” (Moody, 1975). However, Stuart cautions that one is not to search for these experiences to relieve pain; these experiences are given as spontaneous gifts.

References

Near-Death Experiences: Perception is Reality

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Harriet L. Panitz, L.C.S.W.
University of Maryland

ABSTRACT: The authors propose three etiologies responsible for the near-death experience, which they refer to as an altered state of consciousness: physiologic, pharmacologic, and psychologic. They recommend research to determine what developmental factors influence the emotionality of the experience and how in-depth understanding can be used to provide better patient care.

Perception is reality. There are no different types of realities, only that which is perceived by the perceiver. The near-death, or, rather, "deathlike" experience is, like religion, politics, beauty, and sex, in the eye of the beholder.

Harry Stack Sullivan used the term "consensual validation" in referring to the efforts of psychiatrists to find "factors that will prove to be of real moment [italics added] in understanding our intuition of psychopathological situations—and living generally—and in understanding our ubiquitous errors in both of these" (Sullivan, 1962, pp. 258–259). Lewis B. Hill used the term "consensual validation" to mean a shared reality. He suggested that schizophrenics attempt consensual validation in an effort to experience reality (Hill, personal communication, 1951).

Dr. Schnaper is Professor of Psychiatry and Oncology at the University of Maryland School of Medicine, and Head of Psychosocial Services at the University of Maryland Cancer Center. Ms. Panitz is Clinical Assistant Professor at the University of Maryland School of Social Work and Community Planning. Reprint requests should be addressed to Dr. Schnaper at the University of Maryland Cancer Center, 22 South Greene Street, Baltimore, MD 21201.
Mary Baker Eddy, founder of the Christian Science movement, did away with death and thus defined reality: "There is no life, truth, intelligence, nor substance in matter... Spirit is immortal Truth; matter is mortal error. Spirit is the real [italics added] and eternal; matter is the unreal and temporal" (Eddy, 1934, p. 468).

The point of these examples is that, to the experiencer, the experience is real, very real. Our position is that there is a scientific explanation for near-death phenomena and that open-minded, not mind-set, research to demonstrate etiology is possible. Currently, experiencers and researchers have offered anecdotal material to make their cases.

**Study Method**

The emotional aftereffects of unconsciousness in physically traumatized patients was a focus for our study. These patients were unconscious as the result of vehicular accidents, suicide attempts, gunshots, stabbings, falls, and other injuries. The period of unconsciousness lasted from days to many weeks, necessitating artificial life-support systems (Schnaper, 1975).

Over a one-year period, we examined 68 patients after they attained their capacity to verbalize following their recovery from unconsciousness. We told them that the reason for the interview was "Shock-Trauma's interest in your experience while you were unconscious on the Unit." For some it was necessary to ask directly, "Were there any fantasies or dreams?" or "Was there ever any thought or feeling you might be dead?"

**Results**

Of the 68 patients interviewed, 43 (63 percent) claimed amnesia for the period of unconsciousness; included in this group were six (9 percent) who were vehement in expressing their amnesia.

The remaining 25 patients (37 percent) described their experience using their own verbal constructions; included in this group were 17 (25 percent) who were able to relate their experience retrospectively, and eight (12 percent) who pleaded amnesia but subsequently were able to recall the experience.

It was the rule that patients were hesitant in presenting their fantasies, fearing they would be labeled "crazy." The interviewer had to be nonjudgmental and allow time for trust to develop. Three themes
prevailed: being held prisoner; wrongdoing to justify imprisonment; and death. It is interesting that no patient expressed ideas or feelings pertaining to dying, but rather made reference to the state of death.

**Illustrative Vignettes**

*Case 1*

Mrs. A., a widow in her late 40s, drove over an embankment and was unconscious for three days. She was on a stretcher in a corridor near an elevator and began to see “transparent” images of many people of all ages, in all sorts of garb. Regularly, groups would get on the elevator and leave, “like it was this day’s toll of death.” She concluded that these people were dying and that because she was not put on the elevator, “my time had not come.”

Mrs. A. felt incarcerated and was “always trying to escape” by pulling the needles out of her arms. She denied she did so to gain attention but admitted that she disconnected the ventilator tubing, which set off an alarm in the nurses’ station, in order to get the nurses to come to her. She tried in vain, by moving her lips, to get her daughter to take her away, and was very depressed when the visiting medic from the helicopter did not “save” her.

Mrs. A. thought the nurses were very cruel to hold her prisoner but, in the last two days, realized they were there to help her and that it was unnecessary to escape.

*Case 2*

Mr. B., a man in his 30s, suffered a crushed chest while working on his parked truck. He was unconscious for almost two weeks. He said that since he was a truck driver, the mention of the word “accident” produced a fear of hurting someone with his big equipment. All he could see was running the truck into a school bus full of children or running over a car full of pregnant women. He denied the reality that his truck was parked during his accidental injury.

Mr. B. felt at one time that all the doctors and nurses were against him because he had wronged them. In a “dream” he had urinated in bed and believed this was the reason people disliked him. He was not aware that a catheter was in place the entire time he was on the Unit.
In one of Mr. B.'s dreams he had two brothers, Hercules and Colossus, who wore armor and protected him. When he was to be transferred from University Hospital, he heard the word "university" and thought of plans to play football with his brothers, perhaps on some other college team. In reality, he had no brothers and his education was limited to the eleventh grade. Questioned, he admitted his difficulty in distinguishing reality from dreams, vehemently giving more credence to the fantasies.

Mr. B. became very upset and sobbed when queried about a "dream" of a tombstone that his wife had mentioned to the interviewer. In his dream it was as if he were looking at a television screen. There he saw his wife wearing a black veil, and his children standing in a cemetery. He could see the headstone in front of them; on it was engraved his name. Recalling the dream was still tearfully painful to Mr. B. even at this later date.

Discussion

Interviewing more than 100 post-cardiac arrest patients soon after the experience yielded results similar to those described above: two-thirds were amnestic; one-third had distorted recall, each of which reported unpleasant feelings (Schnaper, 1980).

Denial is an unconscious defense that prevents one from seeing that which is unpleasant, particularly about oneself. In the critically ill patient there are the following specific threats that mobilize various other defenses, such as regression, magical thinking, and suppression (Schnaper and Cowley, 1976):

(a) helplessness: In any illness one becomes dependent on someone else for healing and comfort. The defense of regression follows dependency. The caretakers are viewed as protecting or parental figures. The more severe the physical injury, the more intense are the feelings of separation from family and abandonment. The amount of regression is proportionate to the severity of the injury and intensifies the patient's magical expectations of his or her helpers.

(b) humiliation: Injury and hospitalization also engender desperate feelings of indignity in reaction to hospital procedures, such as the bedpan, catheters, and taking blood. Severely traumatized patients are necessarily exposed to these procedures in the admission area and throughout their hospitalization. If they are unconscious when admitted, they experience this humiliation retrospectively when they wake up. If they are semiconscious when admitted, they might view their
clothing being cut off and the other procedures as assault and battery, especially if they have been under the influence of alcohol or other drugs.

(c) body image: One’s body image is one’s conscious and unconscious concept of the physical appearance of the body. Body image can also include one’s car and clothing or one’s perception of one’s environment, all of which contribute to a sense of identity (Schnaper, 1970). Emotional investment in a particular body organ compounds the threat, such as a woman’s attitude toward the removal of a breast. In the severely traumatized patient, the threat of mutilation of the body is often overwhelming.

(d) mental symptoms: The implied threat here is the experiencing of unconsciousness. The etiology may be physical or emotional. Emotional causes are usually a defensive dissociation or blacking out to avoid an emotionally painful situation.

The state of death is impossible to conceptualize, and the thought of dying is terrifying. Since "being dead" cannot even be imagined, a void evolves, only to be filled with superstitions, fantasies, and poetic creations. When a void in consciousness occurs, it must be filled with retrospective fantasies (Schnaper, 1977). The cases described above demonstrate the need patients have to fill that void of consciousness that so frequently occurs in critical illness and injury.

We maintain that all of the anecdotes about life after death can be explained phenomenologically as altered states of consciousness. There are three primary etiologies: physiological, including hypoxia, anoxia, hepatic delirium, uremia, and Meduna’s carbon dioxide therapy; pharmacological, including “mindbenders,” narcotics, steroids, pentylenetetrazol, insulin, barbiturates, and other psychotherapeutic medications; and psychological, including dissociative reactions, panic, and psychoses. Hypnagogic states and eidetic images can claim any of these three etiologies.

Edwin Shneidman’s (1974) study of the general population’s concern for death and life after death revealed some interesting responses to his questionnaires. He found that roughly 23 percent strongly believe in life after death, 20 percent tend to believe, and 22 percent doubt life after death. As to a wish for life after death, 55 percent strongly wish for it and 34 percent are indifferent; and as to the meaning of death, 35 percent think it is the end or final, 13 percent a transition or new beginning, and 17 percent a termination of life but a survival of the spirit.

Human nature being what it is, many of us will continue to deny the unknown, romanticizing it as is done so frequently in the operatic
Liebestod and in stories of "lovers' leap" and "going to his or her reward." Of course, there are the old, the tired, and the religious who look forward to "going home again, to the arms of Jesus."

Out-of-body experiences have been prevalent for years. An example is a Rosicrucian lecture by H. Spencer Lewis (1950) in which "so-called death" became "transition." His description of transition shifts the more recent portrayals of death from something novel to what might be considered old wine in new bottles:

There is just a great lightening of the body. . . . They see themselves lying on the bed. . . . They say they seem to be six or seven feet away and above themselves, looking down on their own physical bodies . . . the sense of great peace . . . of music . . . freedom from all suffering. (Lewis, 1950, pp. 12-13)

The following is a counter-anecdote to the out-of-body experience, personally observed by one of us (N.S.). After resuscitation and a period of confusion, the patient related a distorted account of the experience, while insisting he "saw everything." He was most grateful to the team leader who was now standing at the foot of the bed. He gave the physician rave reviews for the skill with which that doctor had orchestrated the resuscitating group. There was only one problem: the physician team leader was nine hospital floors away during the experience.

Conclusion

The direction near-death researchers must take in their studies of the phenomenon is to define the importance of psychological development as an influence on the emotionality of the experience. A particularly clear example of this is the woman in her 40s, dying of Hodgkin's disease, who had a deathlike experience three weeks prior to her actual death. After the 48-hour episode she made much of the unpleasantness and feelings of abandonment, although she had called out repeatedly during the experience, "I'm coming, Jesus Christ! I'm dead, dear Jesus!" She subsequently related how she was raised by her mother's "silent treatment" and her need to be loved and to be touched (Schnaper and Wiernik, 1979).

This patient was carefully and thoroughly studied by the most modern of medical technologies. The conclusion, supported by the patient, was that she was so frightened of imminently dying and of death that she "flipped" into a dissociative reaction or altered state of consciousness.
Another and more immediate positive contribution by the researchers should be on behalf of those who do experience what is in essence a deathlike experience: when their caretakers are informed and understand, the patients will be the beneficiaries. There are some suggestions emanating from our study of these 68 patients. When the patient is unconscious, or seemingly so, as with stroke, he or she needs to be spoken to, called by name, touched and handled as gently as possible. Listening calms the patient's fears. Listening is the art that complements the science of medicine and can be gratifying. Ominous prognostic and other medical discussions within earshot of the patient should be avoided. These are obvious caveats, but perhaps require restatement (Schnaper, 1977).

As to the patient's "crazy idea," Mrs. A.'s response is relevant and succinct:

To the patient these ideas are very real, I'm afraid. I think perhaps if the staff were told that people have these feelings, are going to say strange things, they will be able to talk with the patient in a different tone of voice and reassure them.

We all dream during a significant part of our sleep period. Sleep is a void in our waking state. This is so in illness, injury, anesthesia, hypnosis, and even in severe emotional trauma. When we awaken from our normal sleep pattern, we can be dream amnestic; recall a "crazy" dream; or, upon hearing or seeing something we associate to, recall that we did indeed dream. How normal it is to fill in a void in consciousness, be it sleep, injury, or emotional shock.

As to near-death experiences, it is more appropriate to refer to them as "deathlike" experiences. We have no intent to malign those who have had or support the "pleasant" deathlike experience. We would conjecture that temporal distance converts the unpleasant to the pleasant. We are all familiar with a widow who hated her husband, yet years after his death tells how wonderful he and the marriage were.

Denial, retrospectively, is the predominant defense mechanism used to deal with the possibility of being dead. The pleasant near-death experience denies the concern for what death might engender: a day of judgment, worms or other processes to make us biodegradable, the fear of loneliness, or separation from family and friends. There are those of us who do fear the reality of death and the dying that precede it. Then we join some death awareness movement to deny death intellectually. We cope by "finding the inner peace of death," "life after death," and so on. Thus we maintain a facade of courage to deny that we are really afraid.
References


Historical Perspectives on Near-Death Phenomena

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ABSTRACT: The authors present an introductory overview of the history of near-death phenomena, followed by a synopsis of near-death research representative of three historical eras: 1880s–1930; 1930s–1960; and 1960 to the present.

Belief in life surviving physical death is hardly a new concept. As long ago as 2500 B.C. men were writing about this incredible phenomenon (Rawlings, 1978). The Egyptian Book of the Dead, considered one of the oldest pieces of literature in the world, contains a collection of prayers and formulas that can be used for assistance in the next world (Rawlings, 1978; Ross, 1979). Ancient Egypt was the first culture to teach that the soul was immortal (Rawlings, 1978). Within that society it was believed that when a person’s physical body died the soul would enter the Judgment Hall of Osiris where it would then begin a life filled with everlasting joy and happiness (Budge, 1956; Ross, 1979). Various ceremonies described within The Egyptian Book of the Dead indicated that the deceased would regain memory, speech, and physical movement upon entry into the Other World. Likewise, the book

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states that when one dies one will be able to recognize deceased friends and relatives within this new world (Ross, 1979).

The ancient Greeks also believed in the existence of the immortal soul. The Greek philosophers Socrates and Plato both advocated that the soul departed from the physical body at death, freed in order to be reunited with deceased friends and relatives. Plato believed that the reunion occurred in a place of great brilliance, after which the soul would leave in order to observe a life review and receive judgment (Rawlings, 1978).

Plato (428–384 B.C.), in the tenth book of The Republic, also described a tale about a soldier, Er, who died on the battlefield. At the moment of physical death Er's consciousness departed from his physical body to roam the countryside, reentering his earthly body just prior to his intended cremation (Rawlings, 1978).

Christianity also assumes a fundamental doctrine encouraging a belief in the immortality of the soul (Rawlings, 1978). This doctrine of belief is founded upon the teaching of the scriptures contained within the Holy Bible. The Bible contains numerous examples to support a belief in life after death. The Apostle Paul made reference to this in his letter to the Corinthians (2 Corinthians 5:1, 7–10):

For we know that when this tent we live in now is taken down—when we die and leave these bodies—we will have wonderful new bodies in heaven, homes that will be ours forevermore, made for us by God Himself, and not by human hands. . . . We know these things are true by believing, not by seeing. And we are not afraid, but are quite content to die, for then we will be at home with the Lord. So our aim is to please Him always in everything we do, whether we are here in this body or away from this body and with Him in heaven. For we must all stand before Christ to be judged and have our lives laid bare—before Him. (The Living Bible, 1973)

As that passage illustrates, Christian belief in an afterlife is dependent upon the spiritual faith expressed within this doctrine. It is also interesting to note that Paul mentioned a life review and judgment process, common elements contained within much of the contemporary near-death literature.

Although many Oriental cultures had expressed beliefs in the afterlife since the third century A.D. (Becker, 1981; Ch'en, 1964), it was not until the eighth century A.D. that those ideas were expressed in written form (Rawlings, 1978). At that time The Tibetan Book of the Dead was created to assist the dying in their transition from life to death (Fremantle and Chogyam, 1975; Moody, 1977; Rawlings, 1978).
The Tibetan account describes the art of dying and delineates the various stages of the soul. Accordingly, upon physical death the soul becomes enveloped within a new body known as the “shining.” Instantaneous travel, heightened sensory awareness, meeting deceased loved ones, feelings of extreme peace and contentment, and a judgment are also described within the content of the book (Becker, 1985; Fremantle and Chogyam, 1975, Rawlings, 1978).

Many of the afterlife experiences described in *The Tibetan Book of the Dead* correspond to traditional Indian yogico-tantric exercises used in meditation (Eliade, 1971). Yoga suggests that within a truly meditative state the person must “die” to this life in order to transcend to a level of higher consciousness. Within the Indian culture, yoga has served as an important tradition whereby we are aware of the possible separateness of body and consciousness; a practice that Mircea Eliade (1971) wrote can help us to anticipate death in order to be reborn into a sanctified life.

Throughout the centuries numerous historical figures have made personal testimonies related to near-death phenomena. Among the better known figures describing such experiences have been Carl Jung, Thomas Edison, Benjamin Franklin, Elizabeth Browning, Eddie Rickenbacker, Louisa May Alcott, and Ernest Hemingway (Rawlings, 1978). In fact, Hemingway’s *A Farewell to Arms* is said to be based in part upon a personal near-death incident he encountered on the battlefield during World War I (Audette, 1982). Likewise, whether based on personal experience or not, a number of other authors have recounted tales containing elements of near-death phenomena. Listed among these have been such people as William Shakespeare, Leo Tolstoy, Edgar Allan Poe, Charles Dickens, Thornton Wilder, Victor Hugo, and Katherine Anne Porter (Audette, 1982; Bertman, 1979; Flynn, 1984; Straight, 1984).

During the 1700s out-of-body and near-death concepts were publicly clarified by a famed Swedish scientist of the era, Emanuel Swedenborg (Rhodes, 1982). For a number of years Swedenborg experienced out-of-body travel, during which many spiritual ideas and deceased people were supposedly revealed to him. As a result of these enlightening experiences, Swedenborg left the realms of science and government to pursue spiritual truths. He recorded his experiences, many anonymously, in hopes of helping others to understand this domain better.

Swedenborg claimed that there is constant interplay between the spiritual world and the earthly world, serving as the source of our emotions and ideas. He stated that in reality humankind is a spirit within a mortal body, here on earth to learn and help others. He also
claimed that the complete human being, in reality, is a married pair. Within his book *Heaven and Hell* (1928), Swedenborg discussed ideas relating to the afterlife: deceased elderly becoming young again; afterlife existence within a nonmaterial world perceived according to the arrangement of ideas and images created within our own minds; and existence in an afterworld in which time has no meaning and space is signified in emotional terms, designated only by how "close" we are to those like ourselves (Rhodes, 1982).

During the 1700s and 1800s various physicians, clergy, and others reported experiences in which people returned from death (Audette, 1982; Rawlings, 1978). An article relating to a near-death incident encountered by the Cardinal Archbishop Donnet of Bordeaux was published in *Lancet* in 1866. Recorded tales obtained from the Chipewa Indians during the 1820s described warriors who traveled outside their bodies at the moment of death, later returning to tell of their spiritual adventures (Schorer, 1985-86). Likewise, tales of NDEs experienced after high doses of hashish were recorded by French hashish clubs during the mid-1800s (Siegel and Hirschman, 1984). Many of these club members were Swedenborg followers as well.

Public testimonies of near-death accounts have become increasingly prevalent during the twentieth century. Whether because of better life-sustaining measures, longer life spans, or more open disclosure of the subject, near-death experiences are fairly commonplace today. Thousands of case studies have documented NDEs, particularly over the past 25 years. According to a 1980 Gallup survey, 5 percent of the adult population have gone through a near-death experience (Gallup, 1982). Projecting this percentage onto the current population, it is estimated that approximately thirteen million American adults have lived through a near-death incident.

**Near-Death Research**

Although accounts of near-death phenomena have existed for thousands of years, scientific research has been necessary to lend credibility to the topic in modern Western cultures. Since the seventeenth century, under the influence of Sir Francis Bacon and the Royal Society of London, the scientific method has replaced doctrines of faith as a valid source of truth within most Western societies. Moreover, areas of study that could not be measured within the realms of natural law and direct observation were seldom welcomed within the scientific community (Ross, 1979).

Nevertheless, interest in the unexplained has prevailed, manifesting
itself within what some consider pseudoscientific areas of study. Scientific research into whether human personality survives physical death has existed for more than a century. Ian Stevenson (1977) has divided this field of endeavor into three historical periods: (1) 1880s–1930s; (2) 1930s–1960; and (3) 1960 to the present.

1880s–1930s

Contemporary near-death research is a derivative of early paranormal experimentation and observation. Paranormal investigators during this era were primarily concerned with collecting, classifying, and analyzing stories related to personal contact with the deceased (Stevenson, 1977). During the 1870s and 1880s the work of William Crookes, a respected chemist, lent support to the scientific study of paranormal phenomena (Ross, 1979). Crookes had originally set out to expose paranormal occurrences as fraudulent; however, he soon came to believe in the existence of certain psi phenomena, or extrasensory perception (ESP).

Many types of psi phenomena were investigated by Crookes and others during the late nineteenth century, including clairvoyance, spirit writing, spirit music, spiritual impersonations, trancelike states, trance speaking, apparitions, and possession (Ross, 1979). Although many published reports were met with criticism and skepticism, public and scientific curiosity continued to grow.

Supported by the scientific community, the Society for Psychical Research (SPR) was established in England during 1882 (Ross, 1979; Stevenson, 1977). This organization was founded by prominent scientists and scholars interested in establishing a formal forum from which to investigate paranormal phenomena. Early members included a number of well-known scientists from Cambridge University, and many members of the society became followers of the spiritualist movement, whose tenet held that psi phenomena were evidence of life surviving physical death. An American branch of the SPR was begun in 1885 under the leadership of William James, a leader in the American spiritualist movement (Ross, 1979; Stevenson, 1977).

A leading SPR member during this era, Frederic W. H. Myers, was extremely interested in proving the existence of life after death. He and his colleagues believed that research into this area would serve three important functions: (1) increase our total understanding of the universe; (2) expand the focus of all science and philosophy to include "the knowledge of life in man independent of blood and brain"; and (3) apply this newfound knowledge to open limitless avenues for further discovery (Ross, 1979).
Despite the quality of the research conducted, work done by the SPR was often met with criticism by other factions of the scientific community. It is believed that the indirect influence of the Darwinian theory during this era created ideological conflicts concerning belief in the existence of the human soul and its potential for surviving physical death (Stevenson, 1977). An example of this conflict is evident in the fact that Alfred Russel Wallace, who together with Charles Darwin developed and publicly advocated the theory of natural selection, was privately an ardent proponent of spiritualism (Stevenson, 1977).

During the late 1800s many scientists began to shift attention from professional psychics to ordinary people reporting paranormal phenomena (Audette, 1982; Ross, 1979). Anecdotal accounts increasingly replaced controlled experiments as evidence of paranormal phenomena, generally receiving the stamp of approval only after intense scrutiny by the SPR. As more cases were reported, discrete psi categories became recognized. With the increased use of these anecdotal accounts, a new philosophy began to take shape within the field of parapsychology, now placing the burden of disproof upon skeptics (Ross, 1979).

Skeptics, many of whom were psychologists and physicians, suggested that these accounts represented evolutionary psychoses used for self-adaptation. That attitude toward paranormal phenomena served as the foundation from which the multiple personality theories of psychological study began (Ross, 1979; Stevenson, 1977). Myers contended that man possessed a subliminal level of cognition, a theory that won acceptance from many scientists and was used to support the spiritualist and nonspiritualist views alike (Ross, 1979).

In 1900 Theodore Flournoy noted that psychology had fully embraced the concept of a subliminal subconscious, though often generally denouncing the existence of spiritualism. Rigid scientific attitudes kept many psychologists from further exploring this area. William James tried to promote paranormal philosophies in the field of psychology, believing that some mental disorders were independent of the physical body. His attempts, however, were generally met with resistance (Ross, 1979).

1930s–1960

Paranormal research relating to life surviving death was greatly ignored during this historical era. As a result of the poor reception such research received prior to this period, many parapsychologists
lost interest, believing this area of study to be "premature at best and hopeless at worst" (Stevenson, 1977). The field turned its attention toward the study of extrasensory perception with living persons.

Although life after death issues were not a primary focus of attention in the field of parapsychology at this time, a few significant research contributions were conducted within this 30-year period. In 1945, Gardner Murphy, a well-respected psychologist, wrote three noteworthy essays on the topic of life surviving death. Although Murphy claimed that much of the existing research was inconclusive, he felt that recurring evidence might be suggestive of postmortem survival (Murphy, 1945a; Murphy, 1945b; Murphy, 1945c; Stevenson, 1977).

Personal testimonies continued to be published in the scientific literature during this period, as well. The near-death accounts of such well-known people as Ernest Hemingway, Richard E. Byrd, and Carl Jung during this era rejuvenated some public and scientific attention, but the attention was basically short-lived (Audette, 1982; Ross, 1979; Stevenson, 1977).

One of the more notable studies of this era was conducted by Donald West in 1948, wherein he sampled a small portion of the English population concerning psi phenomena. West reported that 14 percent of his sample had undergone a hallucinatory experience and 9 percent had reported seeing apparitions of the dead (West, 1948).

A few loosely controlled clairvoyant studies were also conducted at this time in an attempt to communicate with the dead. In the 1950s, Hornell Hart noted recurrent similarities within a large number of reported cases of apparitions and out-of-body experiences (Hart, 1956; Stevenson, 1977). Many of these characteristics paralleled Raymond Moody's (1975, 1977) later findings regarding NDEs.

**1960 to Present**

In 1961, Karlis Osis conducted a survey of physicians and nurses who had witnessed the alleged deathbed visions of their dying patients. Osis concluded that these reported visions, suggestive of postmortem survival, were not hallucinations. He noted that hallucinations of the sick are generally only visual in nature, whereas these accounts included auditory occurrences. He also noted that medical factors predisposing one to hallucinations, such as a high fever, did not increase the number of visions reported. Of those apparitions reported, 90 percent involved communication with close, deceased relatives. This was the first study that used modern survey methods and statistical evaluation in examining death-related phenomena (Osis and Haraldsson, 1977b).
The 1961 survey served as a pilot study for later research conducted in 1977 (Osis and Haraldsson, 1977a). This second study involved the surveying of physicians and nurses from the United States and India about the deathbed visions of dying patients. More than 1,000 Americans and 700 Indians participated in the study. Of those interviewed, 216 American physicians and 255 Indian physicians reported having observed patients who described seeing visions while close to death. Most of these patients were terminally ill. Identity of these apparitions included those already dead, religious figures, and those still living. In cases where the dying patient saw apparitions of the dead, 65 percent felt that these figures had come to aid them in their transition into another worldly existence. When demographic factors such as gender, age, education and, socio-economic status were examined in relationship to specific aspects of patient apparitions, no significant correlations could be identified. Culture and religion seemed to have a slight influence on the reporting of different religious figures in this study, however (Osis and Haraldsson, 1977a, 1977b).

The modern revival of circumthanatology, the study of near-death phenomena (Lundahl, 1982), is credited to Russell Noyes, a psychiatrist. In 1972, Noyes began to accumulate anecdotal accounts of NDEs derived from personal interviews and clinical records. Many of Noyes's subjects were victims of drownings, falls, and similar accidents. Within this research and subsequent works, Noyes noted that persons exposed to life-threatening danger commonly experience feelings of hyperalertness, depersonalization, and mystical consciousness (Noyes, 1972; Noyes, Hoenk, Kuperman, and Slymen, 1977; Noyes and Kletti, 1976a, 1976b, 1977; Noyes and Slymen, 1978–79). According to Kenneth Ring (1982), Noyes's work marked the beginning of two significant changes in the field of near-death studies: (1) a shift from parapsychological dominance to medical dominance in investigating near-death experiences; and (2) an attempt to investigate the experience of dying using the direct interviews of near-death survivors.

In the early 1970s Elisabeth Kübler-Ross began talking publicly about the existence of near-death phenomena. Well-known and respected for her study of the terminally ill, Kübler-Ross became intrigued with the topic and stated that she herself had heard testimonies of such accounts (Kastenbaum, 1979; Moody, 1975). Her comments created a considerable impression upon the general public, and she probably did more to arouse public acceptance and curiosity about NDEs that any other single figure. Although Kübler-Ross openly acknowledged having a great interest in this area of study, she has not published any methodological accounts of her findings (Ring, 1982a).
The affirmation of Kübler-Ross created a more receptive climate for researchers who followed. In 1975, Raymond Moody, Jr. published *Life After Life*, a book that is given credit for coining the term "near-death experience." Moody, a psychiatrist, interviewed 150 people claiming to have had a near-death experience. In examining the content of these interviews, Moody noted the 15 common elements that typify a near-death experience (Moody, 1975). These common elements were described as follows:

1. ineffability (having difficulty describing the experience in words);
2. hearing oneself being pronounced dead;
3. hearing a loud buzzing or ringing noise at the moment of death;
4. feeling that one's consciousness has been detached from the physical body, and/or viewing one's physical body as a spectator;
5. feeling a sensation of total peace and well-being;
6. moving through a long, dark tunnel;
7. meeting spirits of loved ones and/or others previously known;
8. appearing before a "being of light";
9. within the presence of this "being of light," undergoing a three-dimensional panoramic life review;
10. approaching a border or boundary, beyond which there is a world of intense beauty;
11. suddenly returning to one's physical body, sometimes being told that it was not one's time to die;
12. being reluctant or afraid to tell others;
13. undergoing value changes toward life;
14. experiencing a change in attitude towards death; and
15. corroboration of out-of-body events.

Collectively, these 15 elements constitute what Moody referred to as a "core" or deep near-death experience. Despite similarities in reported accounts, no two were found to be identical. Likewise, none of his subjects described all 15 elements within any single account (Moody, 1975).

Moody's book appeared at the top of the best-seller list in this country within a few months of publication. Translated into 30 languages, it was instrumental in attaining worldwide interest in near-death experiences (Ring, 1982).

With international interest sparked, several near-death researchers
convened in Charlottesville, Virginia, during November, 1977, to
discuss future directions for near-death studies. This meeting marked the
founding of the first professional organization dedicated to the study of
near-death experiences, the Association for the Scientific Study of
Near-Death Phenomena (ASSNDP). This organization was instrument-
mental in stimulating scientific research in the area of near-death studies
(Ring, 1982).

In 1979, John Audette published an account of 2,300 cases collected
by Fred Schoonmaker of persons who had nearly died in a life-
threatening situation. Of these reported cases, 1,400 reported having
had a near-death experience. These testimonies served to substantiate
further the existence of near-death phenomena.

In 1980, Ring authored the first book to investigate the topic of NDEs
from a scientific viewpoint. That book, *Life At Death*, was based upon
the interviews of 102 patients who had come close to death. In addition
to the interviewing method, Ring developed and used an instrument
called the Weighted Core Experience Index (WCEI). The purpose of the
WCEI was to examine various elements of the subject's near-death
experience and to determine the "depth" of the encounter. Scores were
based on arbitrarily weighted items used to assign values based upon
various components of Moody's 15 near-death elements (Moody, 1975).
Scores on the WCEI ranged from 0 (absence of NDE) to 29 (a deep, rich
NDE). A score of 6–9 was designated as representing a "moderate"
NDE, while a score of 10 or higher represented a "deeper" NDE. Ring
described the "core experience" as being comprised of a series of five
stages: peace, body separation, entering the darkness, seeing the light,
and entering the light (Ring, 1980). Of the 102 patients interviewed, 48
percent reported having undergone a near-death experience. Ring's
research also attempted to compare the NDEs of three categories of
people: victims of illness, accidents, and suicide. Based upon the re-
results of his interviews, Ring noted that, overall, NDEs occurred most
frequently among victims of illness, and least among those attempting
suicide. However, subsequent research conducted by Ring and Stephen
Franklin (1981–82) did not support these findings.

Ring (1980) also investigated the relationship of gender and reli-
giosity to frequency and depth of the near-death encounter. Religiosity
did not appear to play a significant role in either frequency or depth of
the NDE. Gender did not appear to affect depth of the near-death
encounter; however, a greater number of women experienced NDEs in
relationship to illness, and more men experienced NDEs because of
accidents. Ring cautioned against generalizing from these findings,
however, as the population sample was not randomly selected and,
thus, subject to bias (Ring, 1980).
Ring also noted that many experiencers reevaluate their personal values following their return from a near-death encounter. This reassessment process, or aftereffect, is particularly prevalent among those having undergone a deeper, core experience.

In 1981, the ASSNDP was incorporated in Connecticut as the International Association for Near-Death Studies (IANDS), located at the University of Connecticut. IANDS has since served as a professional and service organization, with an extensive archive of near-death case studies, a research referral system, and this journal, initially published as Anabiosis but since 1987 as the Journal of Near-Death Studies.

In 1982, Michael Sabom published Recollections of Death, a book that recounted the interviews of 116 patients. Only medically documented cases where a patient was unconscious and experiencing a life-threatening situation were used. Patients unconscious only as a result of anesthesia were deleted from the study. Personal interviews were conducted as soon after the event as possible. Of Sabom's respondents, 42 percent claimed to have undergone a near-death experience. Sabom, once a skeptical cardiologist bent on disproving this phenomenon, was impressed by these testimonies, which included many of his own patients. He investigated these accounts from a medical perspective, concluding along with Ring (1980) that medical interpretations alone could not explain away the experiences (Sabom, 1982; Ring, 1982). Likewise, Sabom concluded that demographic variables and the type of life-threatening situation encountered had no influence upon the incidence of NDEs.

In 1982, George Gallup, Jr. published Adventures in Immortality, a book recounting his data derived from a Gallup Poll. Gallup conducted a national survey of 1,500 randomly selected American adults. Based upon his findings, Gallup determined that approximately five percent of the American adult population has experienced a near-death event. Gallup also examined the relationship between the occurrence of NDEs and a variety of demographic variables. Included among those variables were age, gender, race, social class, educational level, occupation, income, area of residence, religious background, and frequency of church attendance. Gallup's data showed little or no relationship linking the incidence of NDEs to the specified variables.

In 1984, Ring completed his second major scientific investigation of NDEs, following up on the results of this first study in 1980. The major purpose this study was to interview experiencers concerning the elements of the NDE and related aftereffects. Forty-two participants were interviewed directly, while an additional 174 subjects completed a written questionnaire. Ring concluded that many near-death experi-
Encounters undergo significant value changes following their NDE, particularly those who have undergone a "deeper" experience. His data, along with those of Bruce Greyson (1981, 1983a) and Charles Flynn (1982), suggest that the near-death experience affects personal value changes in the following ways: deeper love and concern for others; increased spirituality, deemphasizing formal religion; better self-image; lessened fear of death; more acceptance of others; heightened quest for knowledge; an increased sense of purpose in life; decreased concern for impressing others; and a decreased desire to attain material things.

In addition to the various personal transformations already mentioned, some experiencers have also had problems in adjusting to their return to everyday life (Ring, 1984). This is particularly prevalent among core experiencers. The experiencer often has trouble accepting the fact that he or she has been removed from paradise, a place of total peace and beauty, and forced to exist within the earthly realms of pain and sorrow (Ring, 1984).

Many experiencers also become severely depressed as a result of trying to convey the importance of their encounter to others (Bush, 1983; Ring, 1984). Often, health care professionals and family members cannot relate to the concept of a near-death experience, choosing to discount the experiencer's claims as a stress-induced illusion. As a result, experiencers become frustrated and depressed, choosing to keep quiet for fear of being labeled mentally ill (Ring, 1984).

A number of variables account for this unwillingness to listen, most of which are associated with our cultural fear of death and the inability and unwillingness to relate to a phenomenon of this type. Likewise, well-established philosophies among the behavioral sciences have inhibited our willingness to accept NDEs. Orthodox Christianity's varied interpretations of the afterlife also create a skeptical foundation upon which to judge near-death phenomena. Some psychologists have theorized that when an individual is faced with imminent death, ego defense mechanisms take charge to preserve the value of one's existence (Widdison, 1982).

Based upon informal discussions, academic debates, news articles, and articles contained within semiprofessional journals, Harold Widdison (1982) concluded that most psychologists do not feel that a few "deviant cases" of reported near-death phenomena are proof of postmortem existence. He wrote that although many people have experienced close encounters with death, psychologists have received few accounts of reported near-death experiences (Widdison, 1982). However, Barbara Walker and Robert Russell (1989) conducted a study of 117 randomly selected registered psychologists from within the state of
Illinois, 19 percent of whom indicated having counseled a near-death client. This study also indicated that 7 percent of these psychologists had personally undergone an NDE, while 28 percent indicated having had personal contact with a near-death experiencer.

In recent years, the nursing profession has begun to address ways of providing for the spiritual and emotional concerns of the near-death client. In 1978, Anthony Lee observed that many patients would try to discuss their near-death experiences with nurses following cardiopulmonary resuscitation. Feeling that most nurses were not professionally equipped to handle these situations, Lee developed some clinical guidelines to assist in dealing with the problem. Included within the guidelines were giving the patient assurance, whether conscious or unconscious; attentively listening to any near-death accounts expressed by the patient; maintaining a nonjudgmental attitude toward the account; medically charting the event; consoling the patient and family that these reported accounts are common; and observing changes in patient behavior following the near-death event (Lee, 1978).

Annalee Oakes (1981) conducted a survey of 30 critical care nurses, asking them to express their personal and professional feelings toward anecdotal cases involving near-death phenomena. Most respondents were fascinated by the topic. Half of the respondents felt that NDEs should be reported, although they were not quite sure whose specific duty it would be to handle the experiencers' concerns. Eighty percent claimed that if a patient spoke about having had an NDE it would not influence the type of nursing care given.

In 1986, Roberta Orne carried out a more comprehensive study involving the attitudes and beliefs of 912 nurses toward NDEs. Ninety-three percent of these respondents claimed that patient reporting of NDEs would not influence nursing care. Orne also found that nurses' knowledge about NDEs and their "religious precepts" influenced their attitudes toward the topic of near-death phenomena. The greater the nurses' knowledge base, the more positive their attitude. Nurses working in emergency departments had the greatest knowledge concerning NDEs, while nurses in maternity units had the least. Of all the nurses involved in this study, those working in psychiatric services were the most accepting of these phenomena.

One aspect of the near-death experience that has recently begun to receive the attention of near-death researchers is pediatric NDEs, in which children, while still children, report their experiences. While the near-death literature contains several hundred published accounts of adults recounting their childhood NDEs, the literature contains less than 20 documented cases of children describing their NDEs.

Most of the work on pediatric near-death experiences has been car-
ried out by Melvin Morse and his associates (Morse, 1983; Morse, Castillo, Venecia, Milstein, and Tyler, 1986; Morse, Conner, and Tyler, 1985). Nancy Bush has also contributed a documented pediatric case to this small field of literature (1983). These authors believe the pattern of the pediatric NDE is quite similar to that reported by adults. The five stages Ring identified for adult near-death experiences have also been found by Morse and his coworkers in pediatric NDEs.

Acknowledging their sample was small and nonrepresentative, the Morse group did note two differences between pediatric and adult NDEs. The pediatric near-death experiences they studied never contained a life review, nor did their young respondents report experiencing an altered sense of time. William Serdahely (1989-90) studied an eight-year-old boy whose NDE was precipitated by nearly drowning when he was seven. This pediatric respondent also did not have a life review during his NDE, but he was quite emphatic about the fact that time ceased to exist while he was out-of-body, a finding commonly reported for adult NDEs.

One feature unique to Serdahely's pediatric case is that while the boy did not encounter any deceased relatives during his NDE, he was greeted by two deceased family pets during his tunnel experience. The deceased pets comforted him, and after being licked by his dog, the boy found himself back in his body, having regained consciousness in the hospital.

Although our acceptance of people's near-death experiences has improved, their origin is, obviously, difficult to verify. In an attempt to explain the NDE scientifically, numerous theories have been suggested in recent years. Among these are stress-induced limbic lobe dysfunction (Carr, 1982), depersonalization (Noyes and Kletti, 1976a, 1976b, 1977), ego regression (Prince and Savage, 1966), Freudian reductionism (Rank, 1971), drug-induced hallucinations (Rogo, 1984), and birth-recall models (Grof and Halifax, 1977; Sagan, 1979). Likewise, many articles have been published refuting these hypotheses (Becker, 1982; Greyson, 1983b; Grosso, 1981). Of all the research to date, none constitutes absolute scientific proof regarding the authenticity of the near-death experience. However, the findings accumulated thus far have been beneficial in reducing fear of death (Ring, 1982), deterring suicide (McDonagh, 1979; Ring and Franklin, 1981-82), and assessing personal values (Greyson, 1983a; Ring, 1984).

Whether the NDE is a physiological, psychological, and/or spiritual phenomenon, some thirteen million adults in the United States claim to have experienced some form of out-of-body transcendence while in a state of clinical death or near death (Gallup, 1982). Its historical roots
lend some credence to the authentic foundation of this occurrence. In an attempt to increase our knowledge about NDEs through research and anecdotal accounts, we can gain further insight into what might lie beyond death and learn a little about who we are in the process.

References


BOOK REVIEW

William J. Serdahely, Ph.D.
Montana State University


In February of 1989 I attended a lecture by the prominent physicist Kip Thorne titled "Black Holes, White Holes, Wormholes, and Tunnels Through Hyperspace." The flyer announcing Thorne's lecture declared that tunnels in hyperspace "can lead quickly forward in time to the end of the universe and beyond," and I immediately thought of the tunnels commonly described by near-death experiencers (NDErs) leading to the light beyond. I attended Thorne's presentation hoping to find some confirmation of near-death phenomena from the world of physics.

For a very similar reason, I recently read A Brief History of Time, by the eminent theoretical physicist Stephen Hawking. Hawking's goal was to write a book for the lay audience summarizing the latest thinking on the questions that motivated him to do research in quantum theory: "Where did the Universe come from? How and why did it begin? Will it come to an end, and if so, how?" (p. vi). What I found was that Hawking's book does help near-death researchers explain some of the phenomena commonly described by NDErs. But, interestingly enough, near-death theory and near-death research reciprocally help explain some of the unanswered questions posed by Hawking, as he takes the reader through explanations of the very tiniest bits of matter to the very boundary of a vast universe.

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Throughout the book, Hawking strives to find a "complete, consistent, unified theory" of "everything in the universe" (p. 155), the unification of physics theory. While remaining cautiously optimistic and realizing that physicists in the past were wrong when prematurely concluding they had discovered just such a unifying theory, Hawking suggests that the "string theory" may be "the long sought-after unified theory of physics" (p. 165). String theory postulates that a particle may occupy any one of a number of positions along a line, as if on a string. The string may be open-ended or closed in a loop-form, and the string may travel along a two-dimensional surface. Hawking concludes his discussion of the unifying theory of physics by writing: "A complete, consistent, unified theory is only the first step: our goal is a complete understanding of the events around us, and of our own existence" (p. 169).

As I read this last line, the near-death researcher in me could not help but think that the synthesis of the unification theory of physics with the theory of the near-death experience (NDE) gives us one way to meet Hawking's goal of understanding the events around us and our own existence. The synthesis of these two seemingly disparate areas of study may give us a unification of a physics/metaphysics theory to provide us with a more complete understanding of life, the universe, and the cosmos, from the smallest bits of energy of quantum mechanics to the infinite loving energy of the Light. The answer may lie not in a competition between physics and metaphysics for the "right" unifying theory, but in the integration of the two. With this in mind, I did find several ways in which physics and near-death studies interconnect with one another as I read A Brief History of Time.

Hawking's book helps near-death research in at least four ways. First, Hawking provides a physicist's explanation of time, which in some ways is not unlike the concept of time described by NDErs. Second, Hawking gives the reader a brief lesson in the history of the science of physics, a lesson that has great relevance for near-death research. Third, he clearly lays out the scientific methodology of physics, a process with implications for near-death research. And last, Hawking takes us on a journey into fantastic and unbelievable physical realms, from which I was left wondering which was more incredible, the realm of quantum mechanics or the realm of the NDE.

**Time**

The string theories mentioned above "seem to be consistent only if space-time has either ten or twenty-six dimensions, instead of the
usual four” (p. 162). While Hawking does not explain why the numbers 10 and 26 are predicted by string theories and while we are still dealing with theoretical physics here, there is, nevertheless, the suggestion that other dimensions may exist besides the three spatial dimensions and the one temporal dimension of "ordinary reality." Perhaps one or more of these additional dimensions are where our NDErs travel during their out-of-body experiences.

Since the advent of the theory of relativity, Hawking says, we are forced to abandon our notion of absolute time. "Thus time became a more personal concept, relative to the observer who measured it" (p. 143). "Each observer has his own measure of time" (p. 87). Near-death researchers are quite familiar with the myriad descriptions of time given by NDErs: from time being distorted; to time being impossible to determine ("The NDE could have taken a second or an eternity—I just don’t know which"); to "It seemed as if I was travelling at the speed of light." The near-death literature clearly shows the personal and relative nature of the descriptions of time given by NDErs.

Last, Hawking introduces us to a concept called "imaginary time," which is a well-defined mathematical concept, according to the author. If one measures time using imaginary numbers, rather than real ones, the distinction between time and space disappears completely. There are no differences between the forward and backward directions of imaginary time; one can go in either direction. Hawking writes,

This might suggest that the so-called imaginary time is really real time, and that what we call time is just a figment of our imaginations. In real time, the universe has a beginning and an end at singularities that form a boundary to space-time and at which the laws of science break down. But in imaginary time, there are no singularities or boundaries. So maybe what we call imaginary time is really more basic, and what we call real is just an idea that we invent to help us describe what we think the universe is like. (p. 139)

For students of the near-death experience, what Hawking is saying here seems quite similar to what NDErs collectively say about their experience: that their NDE was more real than ordinary reality; that time doesn’t exist in an NDE as it does in “real” life; that one could see the present, the past, and the future simultaneously during the NDE, or that one could go backward and forward in time during the NDE; and that the paradox is that what we think is real is not—that nearly dying tells us that our real home is in the light and our imaginary home is in our physical bodies.
History of the Science of Physics

Hawking, in a nonsystematic way, alludes to the history of the science of physics throughout his book. Several of the points he makes about research in physics are relevant for research into the near-death experience.

First, we know from the history of physics that a concept can be put forth, and even accepted, even though that concept has not been detected or proven. For example, gravitons, "what classical physicists would call gravitational waves," have never yet been observed (p. 70) and yet are an accepted concept of physics. Neutron stars could not be observed when first predicted and were not detected until much later (p. 84). And black holes were theorized before observational evidence supported the theory. Opponents of the black hole theory used to argue that "how could one believe in objects for which the only evidence was calculations based on the dubious theory of general relativity?" (p. 92). Near-death researchers may take heart from our colleagues in physics who have been, and still are, confronted with the situation of developing a theory before there is enough evidence to substantiate that theory, the same position in which we near-death researchers frequently find ourselves.

A second point to come from Hawking's understanding of the science of physics is that what we know today may be very different from what we will know in the future. Thorne said in his lecture that it took 50 years before there was enough evidence for the scientific community to accept the phenomenon of black holes. Hawking points out that what were considered the elementary particles of 20 years ago are not the elementary particles of today. The history of physics has numerous examples of changes in the establishment's thinking and the evolution of theories over time, such as a geocentric universe to a heliocentric one to the Earth on a spiral arm of the Milky Way galaxy; or Newtonian physics to the theory of relativity to quantum mechanics to the string theory. Again, near-death researchers should take heart that just because we can't explain or prove today everything NDErs tell us about NDEs doesn't mean that we won't have more evolved explanations or more powerful evidence in the future. It took physicists several centuries of research to get to where they are today; near-death research started in earnest in 1975.

Hawking also points out that criticism of new ideas from contemporaries happens within his field. Indeed, it happened to him as he was presenting his findings on the emission of radiation from black holes. His idea aroused a lot of opposition initially because it upset the
existing viewpoint, as the prevailing thinking at that time was just the opposite. So, again, even though our colleagues from various scientific disciplines and medical fields may call the near-death experience nonsense, just as a Hawking colleague so labeled Hawking's calculations on black hole emissions, calculations that turned out to be correct, we may take comfort in knowing that near-death research may then be challenging the prevailing paradigm of science. Near-death research may be upsetting the "existing viewpoint" from which paradigm shifts are made.

Predictions

Throughout the book, Hawking alludes to the methodology of astrophysics. His point is that current theories are, of course, based on the measurements and the observations made so far. But in order for a theory not to be discarded, it must make predictions with respect to future observations and experiments.

Near-death studies, while still in their infancy, are beginning to make just such predictions. The work of Kenneth Ring, Bruce Greyson, Melvin Morse, and others on the aftereffects of NDEs is an example of being able to make predictions based on the current theoretical model. As near-death studies evolve as a science, we will need to look more and more at the predictability of our theories within the science. For example, if our theory is that a Stage 5 near-death experience redirects a person's life in a more spiritual way, will we be able to predict who then might have an NDE?

What's More Fantastic?

As I was reading Hawking's book, he introduced me to a universe of physical phenomena that seem fantastic and incredible to me: black holes; imaginary time; antiparticles, antitime, antipeople; quarks, gluons, mesons; supergravity; a universe with a boundary; the total energy of the universe being zero; the fact that the light I see coming in my window as I write this left the sun eight minutes ago; time measured in light years so that the dots of light I see in the night sky may be from stars long ago extinguished or are from stars that are actually in another part of the night sky but look like they are where they are due to the bending of light from gravitational forces. These are amazing concepts and phenomena to my mind.
And so I began to wonder what is more amazing, the concepts in Hawking's book, or these: having an out-of-body experience and being able to describe accurately medical resuscitative measures being performed on one's body; traveling through a dark tunnel; having a life review; experiencing no sense of time; getting a peek at the future; meeting a deceased relative who sends one back to one's body; feeling love and acceptance from the being of light? I don't think what we are talking about here is a binary proposition. Both Hawking's universe and the NDEr's universe are amazing. Perhaps we are simply talking about a universe unfamiliar to a respective group of researchers. As a near-death researcher, I am not highly familiar with the universe of physics. And, it may be that many of the physical scientists are just not familiar with the universe of NDErs. Perhaps it's the unfamiliarity that makes it seem unbelievable.

The more I read and thought about Hawking's book, the more convinced I became that a reciprocity exists between near-death research and astrophysics research. Not only does research in physics help explain some of the NDE findings, but near-death research helps answer some of the questions posed by Hawking in *A Brief History of Time*.

**Four Dimensions**

At the end of the book, Hawking writes, "The question remains, however: How or why were the laws and the initial state of the universe chosen?" (p. 173). Why is it that we live in three dimensions of space and one dimension of time?

Near-death research does provide a possible answer for Hawking here: The above conditions allow humans to experience pain. Unlike our NDErs who almost to a person say they were painfree while in their altered state of consciousness or in another dimension of the universe, the three dimensions of space and the one dimension of time provide both physical and psychic pain from which there can be transformational experiences for that person's psychological and/or spiritual growth.

**Our Place in the Universe**

Also in the conclusion of his book, Hawking says:

We find ourselves in a bewildering world. We want to make sense of what we see around us and to ask: . . . what is our place in [the universe] and where did . . . we come from? (p. 171)
Again near-death studies offer some help here.

It is not uncommon to hear people who have had deathbed visions say they are going "home," back to "the Light." In the altered state of consciousness when near death and looking up to greet the spirit or spirits who have come to assist in the transition, the dying person might say something to the effect that these spirits have come to take him or her "home." The implication then is we come from the Light and we go back to the Light, which is one answer to Hawking's question above.

### Entropy

Hawking talks about a "thermodynamic arrow of time," a direction to time in which disorder or entropy increases. "The increase of disorder or entropy with time ... distinguishes the past from the future, giving a direction to time" (p. 145).

He asks why the thermodynamic arrow of time exists at all. He then proceeds to try to answer that question, first by using the classical theory of general relativity and then by using the quantum theory of gravity, concluding by saying that his revised calculations show that entropy would still increase with a universe contracting on itself.

But as I read this section on entropy, I thought about another explanation, not incompatible with the physical explanations, for the second law of thermodynamics: without entropy, there would be no death. And, without death, there could be no return to the realm or the dimension(s) of the near-death experiencer. So here again we see how the synthesis of physics concepts with NDE concepts can provide us with a fuller understanding of the universe. "A complete, consistent, unified theory [of physics] is only the first step: our goal is a complete understanding of the events around us, and of our own existence" (p. 169), writes Hawking. And so it is that with the synthesis of these two seemingly disparate disciplines that we can begin to approximate Hawking's goal for a complete understanding.

### God

Carl Sagan, who authored the introduction to Hawking's book, states:

This is also a book about God... The word God fills these pages... Hawking is attempting to understand the mind of God. And
this makes all the more unexpected the conclusion...: a universe with no edge in space, no beginning or end in time, and nothing for a Creator to do. (p. x)

Hawking makes a similar statement:

But if the universe is really completely self-contained, having no boundary or edge, it would have neither beginning nor end. . . . What place, then, for a creator? (p. 141)

While Sagan and Hawking seem to have limited themselves by making the assumption that God has no role in the universe once the universe was started and then is functioning according to precise physical laws, once again near-death studies provide us with an expanded vision of God.

First, we do get an understanding of the mind of God from NDErs who have been enveloped by the Light. We are told the Light is unconditionally loving and forgiving, and intelligence itself. Second, we know from near-death studies that God is not as passive as Sagan appears to suggest and as Hawking seems to wonder. Perhaps God does not intervene in the physical laws governing the universe once the Big Bang, or whatever has started the process, has taken place. But we know that God may intervene in the lives of NDErs, hardly a passive role. For example, the near-death literature has many cases where the NDEr is either given a choice by the Light to return to the body or directly told by the Light that this is not the right time for this person, and that he or she must return to the body. Also, the Light has a most important role in the life review where the NDEr feels all the pain he or she has inflicted on others. Without the loving and forgiving Presence present during this kind of life review, such a life review would, indeed, seem to be a most unbearable task.

Conclusion

Hawking concludes his book with the following thoughts. The scientists have been busy trying to describe what the universe is and have not asked why. Philosophers have asked why but don't have the technical background to keep up with the what question. Therefore, "if we do discover a complete theory, it should . . . be understandable in broad principle by everyone, not just a few scientists. Then we shall all, philosophers, scientists, and just ordinary people, be able to take part
in the discussion of the question of why it is that we and the universe exist” (p. 175).

Even though he doesn’t say it, Hawking implies here that the complete theory may lie in the collaboration and cooperation of specialists in quite diverse fields. He does mention “ordinary people” taking part in this discussion, too, and it is interesting to note that more than one NDEr, having had a deep near-death experience, has come back saying, “I don’t know why God or Jesus talked to me; there’s nothing special about me. I’m just an ordinary person.” So before we become too pretentious with our specializations, we need to be willing to listen to everyone, regardless of training, who is willing to participate in this discussion.

Thus, one step toward achieving a complete theory of why we and the universe exist would be the synthesizing of near-death research findings, based, in part, on what we are told by “ordinary people” who turn out to be “extraordinary people,” with the unification of physics theory. For those engaged in the research of astrophysics, reading Moody’s and Ring’s works would be just such a start. And, for those of us engaged in near-death research, reading Hawking’s book seems a most helpful beginning.
To the Editor:

In his Guest Editorial, "A Theory of Death," published in this Journal, Roger Cook (1989) wrote, on the basis of the out-of-body experience and one of his dreams, that nothing leaves the body at death and therefore there can be no entity to survive after death. But some other phenomena seem to cast doubt on his view. To cite only one such phenomenon, Ian Stevenson, who has found from investigating hundreds of reports of reincarnation that some children remember a previous life, has brought to light the following interesting facts (Stevenson, 1987).

More often than not, the subject of reincarnation was born near where the alleged previous personality died. The subject's father or mother had often visited the previous personality's place of death shortly before or soon after the subject was conceived. A significant percentage of subjects remembered that their previous life had ended violently or they had died with "unfinished business." Reincarnation memories tended to be sketchy if the interval between death and rebirth was long.

These findings seem to indicate that when a person dies, something may leave the body carrying information of varied nature about him or her, and that the information is impressed in the area where he or she died. The chances of this process taking place seem to depend, to a great extent, on the manner or circumstances of death. The information seems to be "retrievable" by some persons, and it seems to fade over time.

The above interpretation of Stevenson's findings is not a far-fetched one, considering the facts that information of certain kinds can be electromagnetically "written" into environmental water such as that retained in the bricks of a building, and that some people are sensitive to such information (Slawinski, 1987; Smith and Best, 1989). This interpretation implies that reincarnation involves processes that are purely physical and therefore amenable to empirical investigation.
It is noteworthy that Stevenson's subjects generally do not remember where, how, and in what form they existed during the period between their death and rebirth. This fact could mean that the entity that leaves the body at death, unlike the soul of popular belief, is not a sentient one capable of registering its experiences during its existence outside the body. This absence of memories for the period between lives seems to support my interpretation above.

Whether the persistence of information about a deceased person localized in an area can be called postmortem survival is, in my view, a matter of individual preference.

References


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Roger Cook Responds

To the Editor:

In his comments on my theory, V. Krishnan addressed issues that lie at the point where transcendental and scientific perspectives of the near-death experience (NDE) converge. The main thrust of his letter, that reincarnation involves processes that are purely physical and therefore amenable to empirical investigation, highlights a dichotomy at the center of near-death studies. On the one hand is the transcendental viewpoint adopted by the mystic, and on the other the neurobiological model propounded by neuroscientists (Saavedra-Aguilar and Gómez Jeria, 1989).

In an earlier letter, Krishnan (1989) furnished two examples of how the transcendental approach to NDEs may complement rather than compete with the neurobiological approach. Krishnan drew attention
to the Hindu tradition about the notion of time, which results from our awareness that events in life are successive, following one after the other. This concept of time reflects a basic biological drive; in order to survive, the human organism must absorb sustenance at periodic intervals. It is this recurring need that gives rise to humankind's perception of time as sequential, the "And then . . . , and then . . ." perspective I adumbrated in my article (Cook, 1989).

Krishnan went on to describe how the practitioner of yoga, in achieving the ultimate state of contemplation, samaadhi, or "pure being," succeeds in neutralizing this biological imperative. Instead, time stands still for the yogi, who commonly reports a quality of radiance, as of "a thousand suns." It seems reasonable to infer, as Krishnan did, that the radiant light experienced by the practitioner in this state is similar to that experienced in an NDE. However, it is also possible to infer that the mechanism that gives rise to this phenomenon can be explained neurophysiologically.

One such explanation was suggested by Susan Blackmore and Tom Troscianko (1989). During the process of death the cerebral cortex is starved of oxygen, which causes inhibitory neurons to be suppressed, with a consequent state of hyperactivity. The cells in the visual cortex will start firing randomly, but because they are denser at the center, the result will be a flickering speckled world that gets brighter and brighter farther from the center. The light is perceived as extremely bright, but does not hurt the eyes, because the eyes are not involved at all.

This would be undeniably real to the experiencer. It would at the same time, equally undeniably, be intracranial and therefore not perceivable by an observer. In due time, the yoga practitioner would withdraw from the state of samaadhi and the NDEr would be resuscitated. Both would report an experience that was vivid, real, and true for them.

To return to Krishnan's current letter, my assertion that nothing leaves the body has a dogmatic ring, but I intended to imply no more than that I am aware of no evidence that meets my standards of verifiability for something leaving the body. It may be that impressions of a personality can survive in a physical locale, as Ian Stevenson's work (1987) suggests, and I have some sympathy for the findings of Janusz Slawinski (1987) and of Cyril Smith and Simon Best (1989), insofar as I have been personally convinced by demonstration that water-divining or dowsing does genuinely work. I am particularly in sympathy with the final phrase of Krishnan's letter: my dream and his mystical experience (Krishnan, 1989) can be evidential only for each of us as individuals.
As Ernst Rodin cautioned (1989, p. 258): "Neurophysiology and neurochemistry can give isolated insights, but the demonstration of how neuronal firing patterns are transmuted into a thought or feeling is beyond our capabilities at this time." Contributions such as those of Blackmore and Troscianko signal the direction in which this kind of research needs to go. It seems to me vital that this kind of research and transcendental insights are received as mutually supportive, not mutually exclusive.

References


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