#### ESSA Y

## Ian Stevenson's Contributions to Near-Death Studies

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Most people familiar with the work of Ian Stevenson associate him with his groundbreaking investigations of children who claim to remember previous lives. But Stevenson was also a pioneer in the study of what have come to be called near-death experiences, or NDEs, the transcendent or mystical experiences that occur among many people who have come close to death or have even suffered an apparent clinical death during a severe illness or accident but who then recover or are resuscitated or escape serious injury.

### Stevenson's Role in Fostering Near-Death Studies

The term "near-death experience" was coined by Raymond Moody in 1975. Yet in an article published 16 years earlier, Stevenson recounted the story of a clergyman who underwent an operation under general anesthesia and later reported in detail what happened while he was ostensibly fully anesthetized and unconscious, including the surgeon's leaving the operating room to get another instrument and details of conversations among the operating room staff (Stevenson, 1959: 21). He also noted in that article that nearness to death sometimes heightens an individual's apparent powers of extrasensory perception, and he related the story of an elderly woman whose family had gathered around her deathbed:

Suddenly she seemed much more alert and the expression on her face changed to one of great pleasure and excitement. She raised herself slightly and said: "Oh, Will, are you there?"—and fell back dead. (Stevenson, 1959: 22)

None of the family members present in this instance was named Will, nor could they identify any such relative, save a brother who lived in England. Not long afterwards they received word from England that the woman's brother Will had died two days before the woman's deathbed vision. Stevenson noted that this

case, though superficially impressive, illustrated a significant difficulty with spontaneous cases, namely that despite the event having been witnessed by several people, none of them had made a written account before receiving word of her brother's death.

Stevenson furthermore reported in medical journals, again several years before NDEs had a name, that he had amassed and was analyzing nearly 50 cases of persistent consciousness during close brushes with death, involving out-of-body experiences, unusual mental clarity, and ecstasy, and he urged his fellow physicians to inform themselves and to inquire about such experiences in their patients (Stevenson, 1971).

One of the earliest NDE accounts Stevenson collected was that of George Ritchie, a fellow psychiatrist at the University of Virginia, who had had an outof-body experience with veridical perceptions after having been pronounced dead from double lobar pneumonia in the Army during World War II. With Stevenson's encouragement, Ritchie began lecturing publicly about his experience. In 1965 Ritchie's narration of his account to participants of a seminar at the University intrigued an undergraduate philosophy student named Raymond Moody, who recognized the similarity to Plato's story of Er in The Republic and other ancient Greek accounts. Ritchie alluded in his lecture to research by Stevenson, who was at the time Chairman of the Department of Psychiatry. Moody went on to teach philosophy and then graduate from medical school elsewhere, and during that time he collected enough similar cases to write his groundbreaking book Life after Life (1975), in which he coined the term "near-death experience," bringing the phenomenon to public attention. When Moody returned to the University of Virginia the following year to begin his psychiatric residency training, Stevenson introduced him to donors interested in funding scientific research into this newly-described phenomenon. However, Moody disagreed with Stevenson's belief that NDEs, and particularly their implications for the question of postmortem survival, were amenable to scientific investigation, and he declined to participate in the research. He did, however, maintain a very cordial relationship with Stevenson, and turned over to him for study some of the voluminous correspondence he subsequently received from near-death experiencers who had read his book.

With that connection established, the University of Virginia started to become known as a center for near-death research. Even though NDEs were not Stevenson's primary focus, he recognized their importance and encouraged his students and junior colleagues to pursue their investigation of such events. Through his encouragement and mentorship, Stevenson played a vital role in furthering the near-death research of a number of scholars both at the University of Virginia and abroad, including Emily Cook (later Emily Kelly), Justine Owens, English psychiatrist Nicholas McClean-Rice, Australian sociologist Allan Kellehear, Indian psychologist Satwant Pasricha, and myself. Several of us received initial funding for our near-death studies from research grants that Stevenson obtained from various foundations, institutes, and donors.

My relationship with Stevenson began in 1972, when he offered me an elective opportunity at the University of Virginia during my senior year at another medical school. Largely on the basis of that relationship, I returned to Virginia for my psychiatric residency training and collaborated with Stevenson on following up on NDE accounts from Moody's correspondents and other individuals who subsequently learned of our interest in the phenomenon. Two decades later, I was able to return to Virginia thanks to a research grant we had obtained to collaborate on a study of long-term aftereffects of NDEs on a cardiac care unit. I was able to work for another decade with Stevenson at the University of Virginia before he finally succumbed last year to a life-long struggle with pulmonary disease.

## Stevenson's Publications on Near-Death Experiences

Stevenson's publications on near-death experiences encompassed three overarching aspects of the phenomenon: its phenomenology, its implications for the mind-body and survival questions, and methodological advances in its investigation.

## Phenomenology of Near-Death Experiences

Stevenson published several articles that delineated or expanded our understanding of the phenomenology of NDEs. He and I collaborated on an early paper published in a mainstream psychiatric journal describing the common features of 78 near-death experiences, based on firsthand written or tape-recorded accounts followed up with detailed questionnaires, personal interviews, and examination of medical records (Greyson & Stevenson, 1980). We found that these experiencers tended to report other transcendental experiences more often than did either the general population or psychiatric patients. Specific features of the NDEs did not conform to the pre-existing beliefs of the experiencers, but there were suggestions that cultural and psychological factors influenced experiencers' perceptions or reports of the NDE. We found that many important features of NDEs were more pronounced in experiencers who had not taken drugs or alcohol, controverting the brain dysfunction model of NDEs. While we did find some support for the role of NDEs as adaptive psychological responses to the imminent threat of death, apparent extrasensory and veridical out-of-body perceptions during the NDE seemed to require a different explanation. Finally, we found that the attitudinal and behavioral changes following NDEs were more pronounced and pervasive than those following other psychic experiences. We argued then, as Stevenson did in other publications, that studying NDEs was important not only to our understanding of the dying process, but also to the clinical care of terminally ill patients, grieving families, and suicidal patients.

In the first systematic cross-cultural investigation of near-death experiences, Stevenson collaborated with Satwant Pasricha in a study comparing features of NDEs in India with American cases (Pasricha & Stevenson, 1986). They interviewed Hindu-speaking experiencers or firsthand informants in northern India and compared their reports with those from the Greyson and Stevenson (1980) study described above. NDEs from both cultures shared many features in common, such as seeing deceased acquaintances and "beings of light" or religious figures. However, there were some apparently culture-bound differences. For example, NDEs in India did not typically include encounters with tunnels or lights. Near-death experiencers (NDErs) in India tended not to report viewing their physical body after they separated from it, as did Americans, but they sometimes reported residual marks on the physical body following the NDE, a feature not often seen in American cases. Indian NDErs commonly described being returned to life because a spiritual arbiter (Chitragupta), to whom they were led by messengers, determined that the wrong person had died by mistake. In contrast, American NDErs who described a reason for their return either choose to come back, often because of love for family, or were "sent back" for various reasons, although never because a mistake had been made. Stevenson concluded by arguing against a reductionist interpretation of NDEs as nothing but expressions of culture-bound beliefs, in that cultural variations in linguistic descriptions do not weigh for or against the reality of the phenomenon described.

Stevenson and Emily Cook later analyzed 122 experiences in which persons described involuntary recall of memories (Stevenson & Cook, 1995). Comparing NDEs that did and did not include involuntary memories, Stevenson concluded that these "life reviews" were more likely when the close brush with death was the result of a sudden, unexpected accident. The life review was more commonly described as anterograde (that is, from childhood to the present) rather than as retrograde, simultaneous, or randomly sequenced, and it was overwhelmingly described as very rapid. Despite the speed of the presentation of memories, the majority were also described as detailed, realistic, vivid, and encompassing the experiencer's entire life. A majority of experiencers also reported some form of judgment accompanying the life review, most often conducted by the NDErs themselves. Stevenson noted that this judgment that often accompanies a life review, by no means a pleasant experience, argued against the psychodynamic interpretation of involuntary memories as a pleasurable distraction producing a "euthanasia effect" in those about to die. Instead, he reported that the purpose most often ascribed to a life review by experiencers was to guide them in amending their behavior after their death.

# Implications for the Survival Hypothesis

It was clear from the start that Stevenson's interest in NDEs stemmed from their implications for the relationship between mind and body and for the possibility of mind surviving bodily death, a fact that he never hid. As early as 1977, in a critical review of the history of research into the evidence for survival, Stevenson included the (then) recent studies of persons near death who reported having seen their bodies from an out-of-body perspective (Stevenson, 1977). He noted that such cases had as yet contributed little to the evidence for survival, but he suggested that investigation of veridical out-of-body and extrasensory perception and heightened mental clarity during these experiences suggested that the mind-brain relationship was not as clear-cut as usually assumed.

Shortly thereafter he and I collaborated on an article that was published in *JAMA: The Journal of the American Medical Association*, entitled "Near-Death Experiences: Relevance to the Question of Survival after Death" (Stevenson & Greyson, 1979a). In this essay we noted academic near-death researchers' tendency to skirt the survival question and briefly reviewed the near-death literature to that point in time. We pointed out that NDE reports from differing cultures, while showing some influence of culture-bound expectations, also show remarkable uniformities suggestive of survival. These features included accurate out-of-body perceptions, exceptional mental clarity when apparently separated from the body, accurate perceptions of events going on at a considerable distance from the physical body, and encounters with deceased relatives and friends, some of whom the near-death experiencer could not have known had died. We suggested that if researchers refused to conjecture about the possibility of postmortem survival they would be unlikely to seek or recognize evidence bearing on that question.

It might be thought that the flagship journal of the American Medical Association would be an unusual venue for the publication of an article on the survival issue, and indeed that journal subsequently published a letter to the editor protesting that such a traditionally religious topic was out of place in a medical journal. In our response (Stevenson & Greyson, 1979b), we argued that publishing this article in a medical journal was justified by the frequent occurrence of NDEs in medical settings, where the clinical observations of physicians might contribute critically to our understanding of such experiences, and by the profound impact of NDEs on death attitudes, including but not limited to belief in postmortem survival, that affect how seriously ill patients approach their medical treatment and the prospect of death.

Stevenson repeatedly argued that features such as enhanced mental clarity when brains are dying challenge the monist view that minds and brain are identical (Stevenson, 1979) and that features such as visions of deceased persons, news of whose death had not reached the NDEr, cannot be regarded as hallucinations but must be taken seriously as bearing on the question of survival (Stevenson, 1981). In fact, Stevenson was so frustrated by the Western materialistic assumption that all unshared perceptions, such as NDErs' visions of the deceased, must be pathological hallucinations that he proposed a new term to avoid that dismissive label. While retaining the word "hallucination" for unshared perceptions that appear linked to mental disorder, he suggested the new term "idiophany" for unshared perceptions that show no association with mental disorder but in fact may convey veridical information. He argued that using a label

that did not connote psychopathology would not only encourage people to narrate their experiences but would also encourage psychiatrists to consider their therapeutic value and implications for the mind-body relationship (Stevenson, 1983).

Finally, Stevenson collaborated with Emily (Cook) Kelly and me in two articles confronting head-on the evidence that NDEs may contribute to the question of survival after death. The first of these articles, published in this journal, noted the neglect of the survival question by most near-death researchers, despite that being the major source of popular interest in the topic (Cook, Greyson, & Stevenson, 1998). We delineated three features of NDEs that provide indirect evidence supporting the survival hypothesis: paradoxically enhanced mental function during periods of brain impairment, seeing the physical body from an external visual perspective, and paranormal perceptions. Lucid mental processes under diminished physiological conditions that most neuroscientists regard as incompatible with complex cognitive activity suggest an independence of mind from brain under such circumstances, permitting consideration of the possibility that mental activity may persist after brain death (e.g., Owens, Cook, & Stevenson, 1990). Studies have documented the accuracy of NDErs' descriptions of their physical bodies as viewed from different spatial locations, again suggesting that the mind may be less tightly bound to the physical body under certain conditions (e.g., Sabom, 1982). And reviews have identified numerous accounts of NDErs' accurate reports of perceiving events at a distant location, many verified by independent witnesses, suggesting that NDEs are not entirely subjective in origin (e.g., Hart, 1954). We described the details of 14 NDEs that included all three of these features suggestive of survival.

In a second article on this topic, we noted that 92% of NDErs whose medical records documented their proximity to death reported enhanced mental functioning, including increased speed, logic, and clarity of thought; visual and auditory clarity; vividness of colors; and control of cognition; half of such NDErs reported looking down on their physical body from a different spatial position; and a small but significant number reported verifiable events outside the range of their physical senses (Kelly, Greyson, & Stevenson, 2000). While some of these features might be explainable by different mechanisms, the occurrence of all three features together in individual NDEs makes the survival hypothesis, which might explain all three, more credible. We described three additional, newer cases that included all three features and concluded that the evidence from NDEs was far from compelling a belief in survival, but strong enough to permit such a belief, particularly in the light of convergent evidence from other lines of research.

### Refinements in Methodology

Another consistent thread throughout Stevenson's research into NDEs has been progressive refinement in research methodology. In the 1979 *JAMA* article

described above (Stevenson & Greyson, 1979a), he noted methodological pitfalls in near-death research up to that time, stemming from the confounding influences of cultural differences, physiological and psychological circumstances of a close brush with death, researchers' interviewing techniques, and inadequate medical records. He noted that much of the near-death literature rested on uncorroborated statements of patients about their closeness to death and that evaluation of many explanatory hypotheses required data regarding these patients' physiological conditions at the time of the near-death event.

A decade later, Stevenson and his colleagues published a comparative study of medical records of purported NDEs (Stevenson, Cook, & McClean-Rice, 1989). They were able to examine the medical records of 40 patients who described NDEs occurring in a medical setting recently enough to have had medical records preserved. These 40 near-death events included 29 illnesses, surgeries, or childbirths (72.5%), nine accidents (22.5%), and two intentional overdoses (5%). Stevenson and his two colleagues each independently rated each of the 40 records for evidence of life-threatening illness or injury, such as documentation of heart rate, respiration, blood pressure, and impaired consciousness. They categorized each record as documenting (1) no serious illness or injury, (2) serious but not life-threatening illness or injury, or (3) illness or injury so life-threatening as to be likely to end in death if not for medical intervention. Thirty-three of these patients (82.5%) claimed to have been dead or near death; 21 claimed to have been told that by medical personnel. However, in only 18 cases (45%) did the medical records contain documentation of life-threatening illnesses or injuries, such as cardiac arrest, anaphylactic shock, and severe head injuries, whereas 22 records (55%) did not. Stevenson and his colleagues considered that deficiencies in the medical records or the occurrence of the NDE prior to the onset of documented medical treatment may have accounted for some of this discrepancy between patients' reports and medical documentation of life-threatening status. However, they concluded that one's belief that one is dying, whether or not that is the case, may be an important precipitant of a near-death experience, and in fact they suggested that a better name for these events might be "fear-death experiences."

In a subsequent review of medical records comparing near-death experiences with such "fear-death experiences," Stevenson and his colleagues compared the features of NDEs in persons who would have died without medical intervention and in persons who were not in such danger (although, again, most of them thought that they were) (Owens, Cook, & Stevenson, 1990). They found that persons who had actually been in danger of dying were more likely than the comparison group to report perceiving bright light and experiencing enhanced cognitive function. The two groups did not differ in reports of being in a tunnel, experiencing positive emotions, believing they had left the physical body, remembering past life events, or believing they had been near death. They concluded that the presence of many characteristic NDE features in persons who had not been near death supported a psychological interpretation of the

experience; the correlation of other features with documented proximity to death supported a physiological interpretation of the experience; and the increased incidence of enhanced mental activity in persons whose brain functions were most severely impaired supported a transcendental interpretation of the experience.

That comparative review of medical records of NDEs was published in *The Lancet*, the mainstream medical journal with the highest "impact factor," a measure of its scientific importance. It predictably stimulated a number of letters to the editor. In a response to those letters, Stevenson and his colleagues pointed out several additional methodological considerations: the role of an investigator's attitudes in inhibiting experiencers from revealing their accounts; the distinction between mental clarity during the NDE itself and confusion regarding events preceding the NDE; the inadequacy of hypotheses that might explain selected features of an NDE but that are inconsistent with others; the danger of dismissing transcendental hypotheses simply because they are thought to contradict popular paradigms; and the fact that psychological, physiological, and transcendental explanations are not mutually exclusive (Owens, Cook, & Stevenson, 1991).

In addition to emphasizing the importance of medical documentation in NDE research, Stevenson argued for greater methodological rigor in the collection and analysis of cases. For example, in an article subsequent to Stevenson and Pasricha's (1986) cross-cultural study of NDEs in India and America, Susan Blackmore (1993) had reported that three of eight NDEs she had collected from India did in fact include a tunnel, a finding that she interpreted as supporting her model of NDEs as products of brain physiology. Stevenson and his colleagues responded with a methodological critique of Blackmore's survey (Kellehear et al., 1994). They noted that Blackmore had based her analysis on only eight experiences investigated solely through correspondence, whereas other studies with larger samples investigated through personal interviews had failed to find any evidence of tunnel experiences in India. Furthermore, they noted, none of Blackmore's correspondents had used the term "tunnel" spontaneously; three who had mentioned darkness accepted the term "tunnel" only after Blackmore had suggested it in leading questions. Moreover, none described a brightness in the center, a critical part of Blackmore's physiological hypothesis. Finally, Stevenson and his colleagues noted that Blackmore had collected her cases through advertisements in an Indian newspaper directed at a highly educated, English-speaking readership, atypical of the Indian population. They concluded that, rather than developing an explanatory model based on the data, this was an example of starting with a hypothesis and then "torturing data until they give you the answer you need" (Kellehear et al., 1994: 112).

In his final publication on near-death experiences, Stevenson collaborated with me and Geena Athappilly, then a medical student from another university doing a research elective at the University of Virginia, as I had done with Stevenson more than three decades earlier. This study addressed the degree to

which cultural expectations of the dying experience influence reports of NDEs. As his last publication on the topic, it is fitting both that it compared his earliest NDE cases, collected prior to Moody's coining of the term "near-death experience," with our most recently collected NDEs and that it was published in the Journal of Nervous and Mental Disease, which had always been the mainstream medical journal most receptive to his work (Athappilly, Greyson, & Stevenson, 2006). Noting that Moody's 1975 description had come to define NDEs both among the academic community and in the popular imagination, we questioned the degree to which that model had shaped subsequent experiences, their recall and retelling, and the collection of their accounts. We compared the occurrence of the 15 characteristic features of Moody's model among 24 NDE accounts Stevenson had collected prior to 1975 and among 24 accounts collected in recent years, matched to Stevenson's pre-Moody cases on demographic, psychosocial, and physiological variables. With the single exception of the tunnel experience, which was more common among the recent cases, the two samples were indistinguishable, controverting the hypothesis that prevailing societal models substantially influence reports of NDEs.

#### Conclusion

Throughout his career, Stevenson's writings were permeated with an openminded scientific attitude—the attitude of true skepticism rather than that of debunkers who try to pass themselves off as skeptics. In an early review of the field, he wrote:

It is not helpful to declare that all near death experiences provide evidence of our survival after death; but neither is it helpful to categorize them all as merely "toxic psychoses." I can feel dogmatic about only one conclusion in this controversy: that we still have a great deal to learn from the study of near death experiences. (Stevenson, 1980: 272)

After an additional decade and a half of research, an interview with Robert Kastenbaum, editor of *Omega*, revealed that Stevenson's conclusion, but not his skeptical attitude, had evolved:

I believe that near-death experiences do not lend themselves to any single interpretation. They vary a great deal in the circumstances of their occurrence and in the content of the experience. I do believe, however, that a small number of them add to the evidence for mind/brain dualism, by which I mean that mind and brain, although interacting during life, are not identical and that minds may survive the death of the physical bodies with which they are associated. (Kastenbaum, 1994: 180)

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