

THE HANDBOOK OF NEAR-DEATH EXPERIENCES by Janice Miner Holden, Bruce Greyson, and Debbie James (Eds.). Santa Barbara, CA: Praeger Publishers, 2009. Pp. xv + 316. \$49.95 (hardcover). ISBN 978-0-313-35864-7.

The Handbook of Near-Death Experiences aims at summarizing the main findings and conclusions of 30 years of research into near-death experiences (NDEs). It is edited and written by leading experts in the field. Kenneth Ring, a prominent NDE expert himself, boldly states in the foreword that this book “is now and is likely to remain for many years the standard reference work for the field” (p. ix). Already a quick glance at the authors list, the table of contents, and the reference list shows that this is no overstatement. The book constitutes an unprecedented overview on 10 different subtopics discussed in the scholarly NDE literature. It fills an important gap among many other volumes on NDEs that all too often present unduly superficial treatises of a subject the complexity of which we have barely begun to map and understand.

The book contains 11 chapters. After the introductory first chapter, which offers a historical overview of the field of NDE studies, each following chapter focuses on a particular subtopic of NDEs and the respective research performed within this field, and addresses open questions worthy of future investigation. Typically, these chapters comprise 20–25 book pages, plus about 50 to 150 literature references for each chapter listed at the end of the book.

In chapter 2, Nancy L. Zingrone and Carlos S. Alvarado present an overview of scholarly inquiry into the contents and circumstances of pleasurable Western adult NDEs, the most familiar subcategory of NDEs that often features out-of-body experiences (OBEs) and feelings of peace, travelling through a tunnel or dark area, or being surrounded with light. This focusing on a specific subcategory of NDEs already reflects the often-underestimated complexity of NDEs. For example, unpleasurable or distressing Western NDEs with different features also exist—treated in chapter 4 of the book. Similarly, non-Western NDEs from different cultures seem to vary in important respects from typical Western NDEs—some of these variations are discussed in chapter 7. After the overview on pleasurable Western NDEs, Zingrone and Alvarado close with recommendations for future research. These include paying more attention to the existing literature on OBEs, investigating claims of veridical perceptions during OBEs, studying features such as how the experiencers perceive themselves during the OBE (e.g., as with or without a body, as a point of light, etc.), and conducting systematic studies on the elements present in the descriptions of the “transcendental” environment.

In chapter 3, Russell Noyes along with Peter Fenwick, Janice Miner Holden, and Sandra Rozan Christian describe the various aftereffects of pleasurable Western NDEs. Because NDEs are profound and emotionally

powerful experiences, they often radically change not only one's previous attitude toward death, but also one's social, religious, and general attitudes toward what is important in life. Not all of these changes are by themselves positive or life-enhancing. And, even if NDErs are affected very positively by their experience, they can still suffer from a deep feeling of alienation from spouses or friends who are not able to adjust to these suddenly altered attitudes. Thus, negative aftereffects of a secondary type might be the consequence for the NDEr and his or her family. For example, several studies found that the divorce rate of NDErs was strongly increased as compared to control groups. With regard to parapsychological issues, it seems that NDErs continue to report paranormal episodes and periodic alterations of their consciousness that were not present before their NDE. This suggests that NDEs render people more suggestible or more accessible to psychic phenomena, or simply more aware of them.

In chapter 4, Nancy Bush provides an overview on the contents and aftereffects of distressing NDEs. Far from what is often assumed, not all NDEs are pleasurable. In fact, there are three different types of distressing NDEs. The first type contains the typical elements also present in pleasurable NDEs. But instead of feeling peaceful and blissful, the experiencer is profoundly frightened and terrified by them. The second type of distressing NDEs involves "a paradoxical sensation of ceasing to exist entirely, or of being condemned to a featureless void for eternity" (p. 71). The third type represents downright hellish experiences featuring threatening demons, hell-like landscapes, falling into dark pits, and so forth. It is unclear why some people have pleasurable NDEs whereas others have distressing NDEs. So far, no causal relations, such as distressing NDEs being experienced predominantly by criminals or by persons with strong feelings of guilt, have been identified.

In chapter 5, the most touching of all the book's chapters, Cherie Sutherland summarizes the research findings regarding NDEs of Western teens and children. The NDEs of very young children are of particular interest for NDE research because infants can be regarded as comparably free of cultural and educational influence. Thus, it is surprising that NDEs of even very young Western children feature the same elements as NDEs of Western adults: apparently veridical OBEs, tunnels, bright lights, beings of light, deceased relatives or friends, but also life reviews. Some also experience distressing NDEs and their respective aftereffects. It is especially surprising that there are several case reports in which young children claim to remember NDEs from life-threatening events that had already happened during the first days or months after birth. One might ask: Why are they able to properly perceive and remember such events at all, given that their eye and brain structures are regarded as not developed well enough to provide proper visual perception and to store such detailed memories at such early ages? These reports challenge current theories on brain development and functioning—if they can be trusted. But for now,

there are no reasons that would justify rejecting these cases simply because they don't fit into current mainstream models of the mind. They obviously deserve the interest of the scientific community and should be looked for in future investigations.

In chapter 6, Janice Miner Holden, Jeffrey Long, and B. Jason MacLurg examine research performed to determine the characteristics of Westerners who have experienced NDEs. They discuss demographic and psychological variables that might influence the likelihood that somebody will experience an NDE, or the quality and depth of the NDE. Among others, these variables include gender, age, ethnicity, education, socioeconomic status, occupation, religious affiliation and religiosity, physical disabilities such as being blind, psychopathological characteristics, or fantasy proneness. In sum, the investigations addressing these variables show that none of them allow for predictions about who will have an NDE and of what quality it will be. In other words, any one of us can have an NDE of unpredictable depth and quality under given circumstances. Thus, the authors conclude:

We found little evidence to support previously proposed biological, psychological, or sociological explanations as the sole cause(s) of NDEs. . . . Visual experiences in blind experiencers, including those blind from birth, provide strong evidence of the insufficiency of biological, psychological, or social hypotheses, either individually or in combination, to explain NDEs. Converging lines of evidence support the hypothesis that the cause of NDEs involves some component(s) other than or in addition to biological, psychological, or sociological factors alone." (pp. 132–133)

I would have also been interested in learning whether the ingestion of strong pharmaceuticals influences NDEs, and, if yes, in what way. But the authors included no information on this. Still, I doubt that any answer to this question would have an impact on the above-cited conclusions.

In chapter 7, Allan Kellehear provides an overview of the features of non-Western NDEs described in the literature and adds speculations about the origin of these differences. These non-Western NDEs include case reports from different Asian countries and the Pacific Islands, as well as from hunter-gatherer cultures of both Americas, Africa, and Australia. In comparing the different narratives, Kellehear shows that well-known features of Western NDEs such as the life review or the tunnel sensation are *not* universal. Although Kellehear does not explicitly discuss encountering ineffable brilliant lights, as reported from many Western NDEs, it is my impression from reading the literature and Kellehear's chapter that these experiences are also no universal feature. Given such differences, Kellehear

argues that explanatory models for NDEs that are based solely on brain physiological processes cannot account for the whole picture. In his eyes, the reported differences point to sociocultural influences that manifest during NDEs. For example, he attributes the lack of tunnel descriptions in NDEs in certain cultures to different verbalizations, interpretations, and translations of basically the same universal experience, namely travelling through an area of darkness. Because Asians will not be so familiar with real tunnels as Westerners, they won't report so many tunnel sensations in their NDE narratives, but replace them with other descriptions such as crossing a mere darkness.

Although I agree with Kellehear on the major conclusions he draws, he seems to put too much emphasis on possibly divergent interpretations of the allegedly universal NDE feature of travelling through a dark region. First, from the little data available, it seems that travels through dark regions are in general less commonly reported by non-Western NDEers than by Western NDEers—especially as a crucial feature occurring predominantly around the *beginning* of NDEs. Second, some Western descriptions of travels through tunnels (such as being whirled through them at an enormous speed without the contribution of one's own intention) and non-Western dark areas (such as walking through a dark rocky chasm in the mountains on one's own feet at normal walking pace) seem too dissimilar to be regarded as culturally determined verbalizations of the same basic experience. Third, typical Western tunnel experiences include the encounter of a brilliant, empathic, and ineffable light. Typical Western NDEs also include a life review—even in some narratives of very young children without prior knowledge of NDEs and largely devoid of cultural influences. Yet, as mentioned above, these features of Western NDEs seem to be missing in other cultures. But why, then, do NDEs of young children with no or only marginal relevant cultural imprints parallel the NDE patterns of adults from their own culture? Assuming that exposure to sociocultural influence shapes the experience of tunnels, lights, or life reviews, should NDEs of young children not be different from those of adults? Like the authors of another recent cross-cultural examination of NDEs (Belanti, Perera, & Jagadheesan, 2008), Kellehear did not touch upon the crucial enigma of features of children's NDEs and the factors shaping them. From the data currently available, it seems possible that accounting for the cultural differences of NDEs will entail a more complex explanatory model than attributing these differences simply to culturally determined modes of verbalization, interpretation, or the subconscious generation of NDE features. Thus, cross-cultural NDE research represents one of the most fascinating areas of future NDE research. Ideally, such investigations should include collecting NDEs of very young children. This approach would constitute a promising way to address the question of which factors govern the structure and content of NDEs, namely: Which elements are determined by brain physiology, by sociocultural influences, or, perhaps, also by some kind of transcendental causation?

In chapter 8, Farnaz Masumian presents an overview on “World Religions and Near-Death Experiences.” This chapter does not in my opinion match the high scientific and scholarly standard present in all of the other chapters. Masumian seemed to be guided by a vision that something in every major religion must somehow match this or that feature of NDEs. While disregarding all incongruencies between traditional lores on the afterlife and the content of NDEs, she constructed numerous alleged correspondences many of which I found too superficial or too decontextualized to be of true significance.

In chapter 9, one of the most fascinating chapters in the book, Janice Miner Holden reviews research performed on one of the most controversial aspects of NDEs: the claim of some NDErs that they had been able to correctly observe what was happening around their unconscious body, or also at some distance. Holden refers to such cases as *apparently nonphysical veridical NDE perception* (AVP). Should cases of AVP be substantiated, they would provide significant evidence that human consciousness can function independently from the brain under certain conditions. There have been two ways of exploring AVP in the past: (a) retrospective studies, i.e., studies in which researchers evaluate AVP reports retrospectively, often long after the NDE has occurred, and (b) prospective studies, that is, studies in which researchers conduct specifically designed investigations with the aim of collecting and documenting AVPs under controlled conditions within a given time frame. In a literature survey of retrospectively published cases of AVP, Holden identified 107 cases. The most impressive case concerns Pam Reynolds, who was artificially rendered into conditions of cardiac arrest and standstill of all brain activity for the purpose of performing a complicated operation under her skull. Nevertheless, she claimed to have observed the scenery from above her body and gave veridical descriptions of incidents that occurred during this operation while she was in conditions of full, deep surgical anesthesia that preceded the standstill of her body functions.

With regard to the few prospective studies that have been done, Holden outlines the difficulties involved in performing such studies, and summarizes that there have so far not been successful documentations of AVPs. Nevertheless, I missed any mention of the findings of a prospective study published by Sartori, Badham, and Fenwick (2006) in this review. The authors reported an AVP and a well-documented incident of unexplained body healing that happened during the NDE of a patient. Moreover, Sam Parnia and colleagues have initiated a large prospective research project involving about 25 hospitals in Europe and North America, the AWARE Study (Parnia, 2008). The aim of this study is to examine potential AVP in 1,500 survivors of cardiac arrest. After some preparation time, it was officially announced on November 9, 2008. Regrettably, this book chapter contains no mention of this project—I suspect because of publication time lag.

In my opinion, chapter 10 constitutes the climax of the book. Bruce Greyson, Emily Williams Kelly, and Edward F. Kelly address the currently available explanatory models for NDEs in detail. In doing so, they analyze the extent to which each model accounts for all features of NDEs—long since the most controversially discussed subtopic of NDE research. Among others, the authors review the hypotheses building on expectation, depersonalization, altered blood gas levels (such as hypoxia, anoxia, and hypercarbia), neurochemical hypotheses (such as endorphins and ketamine-like neuroprotective agents), neuroanatomical hypotheses (such as temporal lobe dysfunction), and the transcendental hypothesis, in which it is supposed that the human mind can also function independently from brain physiology. The authors also address multifactorial hypotheses. It is impossible to give an adequate summary of this vital and detailed chapter in this review. The take-away message is: Things are again more complex than often assumed, especially as assumed by most mainstream scientists. The currently available psychological and neurophysiological hypotheses appear to cover at best only parts of the entire phenomenology of NDEs. Interestingly, the authors also describe examples in which advocates of neurophysiological models seem to have misled their readers, sometimes citing allegedly supportive literature incorrectly. I thoroughly recommend that everybody seriously interested in understanding the role of possible neurophysiological triggers or correlates of NDEs read this chapter in depth.

In the final chapter, 11, Ryan D. Foster, Debbie James, and Janice Miner Holden address practical applications of NDE research for health care and educational settings—including medical, psychological and spiritual health care providers working with NDErs, the terminally ill, or the bereaved. This closing chapter left a twofold impression on me. On the one hand, the authors did a superb job in reviewing the relevant literature and highlighting specific subtopics of it. They also included helpful recommendations for those who attend to NDErs. On the other hand, I felt the imbalance between the importance of the subject—death and dying—and the apparent lack of knowledge about NDEs among many providers who care for NDErs, the terminally ill, or the bereaved. It seems that in many cases NDErs and others who are personally confronted with death meet rather unprepared and helpless care providers when it comes down to discussing and integrating the profound experiences they have encountered, be it in the medical, spiritual, or religious setting. Many decades after Raymond Moody (1975) published his seminal book on NDEs, *Life after Life*, many NDErs still fear sharing their experiences out of concern for being ridiculed or rejected. The NDE hype that followed Moody's book has certainly declined. But people still have NDEs and die. It is my hope that the present handbook keeps the public and the scientific interest in NDEs alive and stimulates further research into near-death states.

CONCLUSIONS

For those who are personally affected by NDEs and death, but also for scientists who struggle to elucidate the many riddles of the human mind, an appropriate understanding of the factors governing NDEs is important. The authors of *The Handbook of Near-Death Experiences* point out in the various chapters that any intellectually responsible explanatory model for NDEs must address the following crucial questions:

- (1) How can complex consciousness, including thinking, sensory perception, and memory, occur under conditions in which current physiological models deem it impossible? As the authors of chapter 10 pointed out, all physiological and psychological hypotheses proposed so far face severe difficulties and are sometimes even inconsistent with the data available.
- (2) How can similar and sometimes *identical* experiences occur under conditions of severe brain dysfunction (such as during cardiac arrest) and under conditions of optimal brain functioning (such as during falls and other circumstances only suggestive of an impending death)?
- (3) Why do crucial features of NDEs of Western babies and children seem identical to those of NDEs of Western adults—assuming that small children have not yet internalized the respective cultural influence and religious education?
- (4) Assuming that brain physiology determines what NDErs experience, why does not everybody experience or remember NDEs, and why can NDEs vary considerably in different individuals? And why do crucial features of NDEs differ in different cultures?
- (5) Assuming that brain physiology in combination with psychological factors determine the features of NDErs, why do expectations regarding the afterlife often contrast with what is experienced during NDEs (not only in both Western children and adults, but also in adults in various non-Western cultures)?
- (6) Why are there several reports concerning NDEs of babies and very young children, who should not be able to remember and retell NDEs according to the standard models of brain development and physiology?
- (7) Why do many NDE-OBErs (and also healthy OBErs) report AVPs concerning the direct surroundings of their motionless body, sometimes also concerning events taking place at distant locations?
- (8) Why do blind persons, even if blind from birth, report such AVPs?

At present, much remains to be clarified. No simple answers to these questions are currently available. Nevertheless, there is no doubt that with the publication of this volume, the time of general and often unsupported speculations about the factors triggering and shaping NDEs should be past. I concur with Ring that this book represents the standard reference work on which the discourse about NDEs should be based in the coming years.

From a parapsychological perspective, discussions of several facets of NDEs and related end-of-life experiences were missing in this book. Examples are unexplained body healings during NDEs or near-death states, shared and reciprocal NDEs (including crisis apparitions) or deathbed visions, reports of mists or lights leaving the body of the dying, reports of unexplained music heard at deathbeds, physical death-related phenomena, or possible relations of NDEs to afterlife descriptions given by children who claim to remember previous lives. Such issues represent topics largely underrepresented in the professional literature on NDEs and near-death states. But for the purpose of this handbook, that is, summarizing the scholarly investigations into NDEs, adding these issues to the already puzzling AVPs might well have bewildered the majority of the target group of readers. Still, it should be stressed that NDEs are far from constituting a single oddity occurring in near-deaths states but are part of an intriguing interconnected web of death-related experiences indicative of paranormal causation. It would take another volume to present and discuss all these relations. Hopefully, such a volume will be compiled one day.

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