Empirical studies of near-death phenomena have been published from the viewpoint of several disciplines: philosophy (Moody, 1975); parapsychology (Osis and Haraldsson, 1977); transpersonal psychology (Ring, 1980); and psychiatry (Greyson and Stevenson, 1980; Noyes, 1979). In this book, Michael Sabom, a cardiologist and professor of medicine at Emory University in Georgia, brings an almost exclusively medical perspective to bear on the study of near-death experiences. Although another cardiologist, Maurice Rawlings, has previously published on this subject (Rawlings, 1978), his book, while not without interest, is more of a sermon than a scientific document.

In contrast, *Recollections of Death* is a sober and objective investigation of near-death phenomena. While readable for the layperson, the thrust of the book is toward arousing the medical community from its dogmatic slumbers. Sabom urges that “caution should be exercised in accepting scientific belief as scientific data”.

Sabom himself was roused to question his scientific dogmas by Moody’s *Life After Life* and, with Sarah Kreutziger, a psychiatric social worker, set out to investigate Moody’s claims. 116 persons formed the basis of the study; 10 of these encountered their crisis event in conjunction with general anesthesia during surgery. Of the remaining 106 cases, 78 were obtained prospectively; 43 percent of these reported a near-death experience (NDE). Sabom concludes from this that NDEs are a “common” event among those who survive near-death incidents. On the whole, Sabom’s findings are consonant with those of previous researchers.
The author distinguishes three types of NDE. The first he calls "autoscopic." Here the subject, during a near-death situation, finds himself "out-of-body," a detached observer of his physical organism, usually from a position suspended near the ceiling. A second type of NDE is called "transcendental." Here the person ostensibly enters an environment that "transcends" the observable physical environment. In the third type of NDE, the person experiences both autoscopic and transcendental elements during the NDE, the latter usually unfolding in sequence from the former. Sabom's basic distinction is useful on the grounds that the autoscopic component of the experience can be verified, whereas the transcendental apparently cannot.

There might be an exception in some rare cases of "meeting" others not known by the near-death experiencer to be dead. These cases were called by William Barrett (1926) "peak-in-Darien." Also, the transcendental component may contain, as reported by Ring, "flashforward" or precognitive elements. In any case, Sabom's work does not focus on these possibilities. Another question that needs to be addressed is why the transcendental generally follow the autoscopic episodes. Prima facie, at least, if an aspect of a person were really "splitting off" from a dying body and embarking on a "journey beyond," this would seem to be the most plausible sequence - i.e., from autoscopic to transcendental.

The most original contribution of this book lies in Chapter Seven, where the author provides some detailed corroborations of the objective nature of the autoscopic component of the NDE. There are, in fact, at least two distinct kinds of questions we can ask about the NDE. One is phenomenological, the other ontological. At the level of phenomenology, the NDE is "real" - i.e., it is what it appears to be. Moreover, it is meaningful in a variety of ways: for the experiencer; for the physician (it may have therapeutic significance); for the student of comparative religion (it may resemble classic conversion experiences); and so forth. But beyond questions of phenomenology are questions of ontology - i.e., is the NDE "really" real, occurring independently of the subject's mind and brain states? My impression is that even among serious researchers of NDEs, there is a tendency to shy away from the ontological question. This may in part be due to a feeling that the phenomenological dimension of the experience is of sufficient importance. On the other hand, one might be reluctant to ascertain that one's favorite research baby is just a fascinating illusion.

The virtue of Sabom's book is that it broaches the ontological question, at least in regard to the autoscopic component of the NDE. Thirty-two of Sabom's patients claimed to be out of their
bodies and able to provide visual accounts of cardiopulmonary resuscitation procedures being performed upon their bodies during periods of apparent unconsciousness or clinical death.

In order to evaluate these reports, Sabom tested the hypothesis that cardiac patients could provide a pseudo-veridical account of CPR procedures on the basis of an "educated guess." He interviewed 25 "control" patients with medical backgrounds similar to those who had autoscopic episodes and found that 23 of them made at least one major error in their descriptions of the CPR procedures. In contrast to the control group, none of the autoscopic patients made any serious errors in their descriptions. Twenty-six of the thirty-two autoscopic subjects had only general, nonverifiable details in their accounts. According to these patients, this paucity of detail was due to their being absorbed in "overall amazement at what was occurring".

Six, however, of the thirty-two provided specific, verifiable details in their NDE reports. Indeed, particularly valuable are the ample and detailed accounts of the NDEs, especially of the autoscopic episodes. Sabom's procedure was to compare the patient's medical report with his own near-death account. He obtained further verification, whenever possible, from relatives who may have witnessed the near-death event. Finally, Sabom's own medical expertise is crucial in the evaluation of these autoscopic episodes. The six cases cited are impressive. Sabom makes a strong case for the veridical nature of the near-death out-of-body experience. In short, we have here for the first time expert medical testimony that patients who apparently are either unconscious or who have lost all vital signs are in reality conscious and capable of accurate observations of the physical environment from a viewpoint spatially separate from their bodily organisms. This rather astonishing fact simply does not fit into the current, orthodox biomedical model.

No less intriguing is the next chapter in which several cases are cited of persons who "learned," after initial NDEs, to have out-of-body experiences. The evidence presented for these extended ecsomatic capacities is largely anecdotal. Nevertheless, they force us to ask an interesting question. In Sabom's words: "Could some latent human ability have been activated by the near-death crisis event, allowing these autoscopic experiences to repeat themselves under non-near-death circumstances?" This question gives rise to another: in addition to the near-death crisis, are there other circumstances, "mechanisms," or "triggers" that may, perhaps in a fragmentary way, activate a latent human ability, an ability to function independently of the ordinary limits of bodily existence? And, if so, what is
the fundamental "mechanism," or complex of "mechanisms," involved in NDE, out-of-body, and related phenomena of transcendence? In my opinion, future research needs to address these questions and to attempt to grasp the NDE in relation to this possibly wider set of psychophysical interactions.

Altogether, Sabom critically examines a dozen possible ways to account for the NDE: as the result of semiconscious states, conscious fabrication, unconscious fabrication, depersonalization, autoscopic hallucinations, dreams, prior expectations, drug-induced delusions or hallucinations, endorphin release, temporal lobe seizures, hypoxia, and hypercarbia. None of these explanations, according to Sabom, quite fit the phenomena they are supposed to account for. Sabom could have made his case more effectively, if he had stated more clearly what it is about the NDE that calls for explanation. His approach is more ad hoc — e.g., he rejects the psychodynamic explanation of NDEs as subconscious fabrications to ward off the fear of extinction. Sabom's reason for rejecting this explanation is that, if true, it works much too inconsistently. For instance, in multiple near-death situations, the near-death (allegedly defensive) experience occurs only once, or it manifests during the least life-threatening situation. But this is not an entirely effective rebuttal, for there is no reason to believe that our psychological defense systems work with infallible efficiency. No doubt it would be desirable if they did, but the subconscious mind is not a computer. And even our best computers have their off-days.

In general, Sabom's strategy is to show that the NDE represents a unique complex of phenomena for which none of the explanations adequately accounts. For instance, endorphins are pain-killing substances released by the brain during periods of stress. The action of endorphins, however, produces effects that last from 22 to 73 hours; freedom from pain in the NDE lasts only the duration of the experience — seconds or minutes. Further, endorphins produce sleep and somnolence, not the clarity and intensity of vision associated with the NDE.

Of special interest is the discussion of hypercarbia — increased levels of carbon dioxide in the brain. Experiments with elevated levels of CO2 are cited in which experiences were produced closely akin to NDEs: light and out-of-body effects, panoramic memories, ineffability, religious presences, and so forth. As Sabom rightly observes, however, we do not know if the CO2 surplus is the sole cause of the NDE or simply a physiological correlate of the NDE. To complicate matters, in the one case in which the patient's carbon dioxide and blood oxygen levels were measured at the very moment of his
NDE, the oxygen level was above normal (thus ruling out hypoxia) and the carbon dioxide level was below normal (thus ruling out hypercarbia). In any case, hypercarbia intoxication constitutes a possibly valuable line of research into NDEs, for it is a method, free of serious risk, of mimicking, fairly closely it would seem, full-blown near-death experiences.

Sabom is very cautious in his conclusions about the ultimate significance of the phenomena he has studied. He does apparently incline toward a dualistic interpretation of near-death phenomena, however, citing for support the philosophical speculations of neurologists Penfield and Sherrington. The most I am willing to say in this brief review is that much of the material in Sabom's book makes the case for anti-dualists considerably more difficult than otherwise.

A separate list of references would have been handy, especially for those not initiated into the medical literature on the subject. On the other hand, there are few, if any, references to the large and relevant parapsychological literature on NDEs and related phenomena. This is unfortunate, since, if — as I hope it will — Sabom's book reaches a medical readership, an opportunity will have been lost to shake them even further from their dogmatic slumbers. For after all, near-death research is only a part of a large mass of explorations into the hinterlands of human potential.

REFERENCES


