Recollections of Death: A Medical Investigation by Michael B. Sabom. New York: Harper and Row, 1982. 224 pp. 3 illustrations. ISBN 0060148950.

The phenomenon now known as the Near-Death Experience (NDE), and experiences closely related to it, have in fact been known to exist since antiquity, as evidenced by passages from *The Tibetan Book of the Dead*, the writings of the ancient Egyptians, and passages from Plato's *Republic*. But in modern times the NDE was established as a phenomenon by and received its name from Raymond Moody, M.D., Ph.D., with the publication of his book *Life After Life* in 1975. Moody was the first to collect cases of the NDE and establish a pattern among the various reports from NDE experiencers (NDErs). His study, however, was qualitative in design and was found to be unconvincing among most in the medical and academic arenas.

To put the study of the NDE on a more quantitative and scientific basis, Kenneth Ring, Ph.D., conducted a psychological study of the NDE, which he published in his book *Life at Death* in 1980. The results of this study confirmed Moody's work, especially in terms of the individual phenomena that constitute what are now called the *core features* of the NDE. Nonetheless, these two works sparked more controversy than anything else, and the scientific and medical communities maintained their skepticism about the NDE, even questioning whether the reports were fabricated or somehow subconsciously suggested by publicity about the phenomenon. Michael Sabom, M.D., was one such person.

It was during the same period as Ring's initial research that Sabom, a cardiologist, began his research into the NDE, yielding his book *Recollections of Death* in 1982. Sabom had read Moody's work and was skeptical of Moody's dualistic interpretation of the data—that the human mind or personality survives the death of the physical body. In Chapter One of his book, Sabom describes the origins of his interest in the NDE. Even though he was a member of a Christian church, he initially greeted Moody's work with a typical scientific skepticism, an "indoctrinated scientific mind," as he put it (p. 3).

In an effort to demonstrate that the NDE was fictional, Sabom conducted a medical investigation of the NDE at the University of Florida Medical School teaching hospital and later at the Atlanta Veterans Administration Medical Center. Sabom describes his methodology in Chapter One. He and his coworker, Sarah Kreutziger (a psychiatric social worker) eventually assembled a sample consisting of 116 cases. The interview method used was similar to Ring's methodology and the same types of data were collected. It is important to point out that Sabom's patients, as Ring's, did not know that the researchers were interested in the NDE until after the patients had given their initial accounts.

Sabom's analysis of the data confirmed the generality of Moody's NDE features. Several of these core features are described in Chapter Two, along with examples from Sabom's own data. In analyzing his data, Sabom classified NDEs as autoscopic (viewing one's own body from an external perspective), transcendental (entering a different reality), and composite or combined (having autoscopic and transcendental elements). The autoscopic category is described in Chapter Three, again accompanied by examples from Sabom's dataset. Chapter Four describes the transcendental and combined categories, also with illustrative cases.

Sabom statistically analyzed the data, as described in Chapter Five, for correlations between frequency of the NDE and several variables. He found no significant correlations for age, gender, race, location of residence, size of home community, years of education, occupation, religious background, frequency of church attendance, prior knowledge of the NDE, or type of near-death crisis event (cardiac arrest, coma, or accident). Also, the content or features of the NDE did not vary significantly with these variables. Thus, Sabom's *first* major contribution to NDE research was this important replication and verification of the work of Moody and Ring.

Sabom made a second major contribution by critically comparing the core NDE phenomena with other psychological experiences proposed to explain the NDE in terms of materialistic models (discussed in Chapter Ten). In accordance with the philosophical and scientific principle of Occam's Razor, parsimony requires that the inadequacy of materialistic explanations be demonstrated before other models can be proposed. Sabom made significant progress toward this goal by comparing the key features of the NDE with those of other psychological phenomena, such as autoscopic hallucinations and reactions to anesthetics, which had been proposed in the literature as NDE explanations. He considered a wide variety of medical and psychiatric syndromes that could possibly explain the features of the NDE. For each syndrome, he showed that the characteristic phenomena differed from those of the NDE. For example, temporal lobe seizures involve negative affect, whereas those who experience at least one stage of the NDE overwhelmingly report positive affect. In this manner, Sabom showed that no materialistic model proposed thus far could account for the content of the NDE.

But perhaps most important was the *third* major contribution of Sabom's work: investigation of operating room (OR) NDEs. His descriptions of these cases are presented in Chapters Six and Seven. Suppose one could arrange for unique, purely visual stimuli to be present at the time of an NDE. If the NDEr could, after the experience, accurately describe these stimuli without previous knowledge of them, and if this accuracy could be documented, then a

materialistic interpretation of the NDE would be strongly challenged. While not designed as such, OR NDEs provide a very close, naturalistic approximation to the visual experiment described above. The patient is unconscious before being brought into the OR, and typically is unfamiliar with the personnel, equipment, or specific procedures used during surgery. Thus, if a patient has an NDE under these conditions, the opportunity exists to compare the patient's recall of the details with the medical records and with standard medical practices. This experiment is not ideal, since a patient might be familiar enough with medicine to reconstruct the events fairly well, or may be able to hear under anesthesia and infer visual details from these perceptions. Even with these flaws, the OR presents one of the best chances to evaluate the NDE objectively.

Sabom recognized this opportunity. He identified 32 cases of autoscopic NDEs occurring in operating rooms, and accessed the medical records for these cases. Comparing the NDE interview data with these records (which the patients had never seen), Sabom found that in every case, the NDEr's report was consistent with the medical records, equipment, and procedures. Of course, the NDEr typically offered more detail than appeared in the records, but where the records were explicit, the interview data were consistent.

It is impossible merely to summarize the reports of these patients while also demonstrating their stunning detail and accuracy. Thus, I provide an extended quotation of Sabom's work as an example, found below. This was the NDE of a retired air force pilot who had a cardiac arrest while in the hospital following two heart attacks, reported to Sabom in 1978 (five years after the incident). Within his account, the NDEr described the behavior of the meter on the defibrillator which was being used to revive him. I note that doctors and medical staff typically do not attempt to revive a living person, so we can be assured that this patient actually was dead, although not irreversibly so. Thus, there is no concern as to whether the patient heard the medical team at work or could somehow see their actions from a bodily perspective. This is the case with all the examples that Sabom describes in Chapters Six and Seven.

Operating Room NDE of a Retired Air Force Pilot (S) (pp. 99–101)

- S: I had the arrest the following morning after the night I had my second heart attack....I think I was sleeping. It was two or three in the morning.... There was no feeling in myself that I was even having an arrest. I wouldn't even have known it unless all the people came around. I think I was probably asleep when the thing arrested. The first thing I remember was hearing Code Blue [another term for Code 99] on the intercom and I remember everyone running in....
- A: Do you remember any of the other details that went on in the room?
- S: I remember them pulling over the cart, the defibrillator, the thing with the paddles on it. I remember they asked for so many watt-seconds or something on the thing, and they gave me a jolt with it.

- A: Did you notice any details of the machine itself or the cart it was sitting on?
- S: I remember it had a meter on the face. I assume it read the voltage, or current, or watt-seconds, or whatever they program the thing for.
- A: Did you notice how the meter looked?
- S: It was square and had two needles on there, one fixed and one which moved.
- A: How did it move?
- S: It seemed to come up rather slowly, really. It didn't just pop up like an ammeter or a voltmeter or something registering.
- A: And how far up did it go?
- S: The first time it went between one-third and one-half scale. And then they did it again, and this time it went up over one-half scale, and the third time it was about three-quarters.
- A: What was the relationship between the moving needle and the fixed needle?
- S: I think the fixed needle moved each time they punched the thing and somebody was messing with it. And I think they moved the fixed needle and it stayed still while the other one moved up.
- A: Did the moving needle ever pass the fixed needle?
- S: I don't think so, but I don't specifically remember.

This account is given in Chapter Seven, accompanied by several other equally impressive cases. Sabom's commentary on the case above was especially telling and compelling:

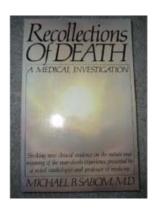
I was particularly fascinated by his description of a "fixed" needle and a "moving" needle on the face of the defibrillator as it was being charged with electricity. The movement of these two needles is not something he could have observed unless he had actually seen this instrument in use. . . . This charging procedure is only performed immediately prior to defibrillation, since once charged, this machine poses a serious electrical hazard unless it is correctly discharged in a very specific manner. Moreover, the meters of the type described by this man are not found on more recent defibrillator models, but were in common use in 1973, at the time of his cardiac arrest. (p.104)

Thus, this patient's report was incredibly detailed and amazingly accurate. Combined with the other such cases that Sabom reported, there is a strong argument to be made that while the bodies died, the people did not.

In order to compare his results with a control group, Sabom interviewed a group of surgical patients who did not report NDEs, and asked them to describe their ideas as to how resuscitations were conducted. Analysis of these reconstructions revealed at least one major error in each account. This contrasted sharply with the NDEr accounts, none of which contained any errors. Also, the descriptions of the control group lacked the clarity and detail of the NDE accounts. It thus would appear that these NDErs truly witnessed OR events they should never have seen.

In the remainder of the book, Sabom discussed potential materialistic explanations of the NDE (as described earlier in this review) and the implications of the NDE for various fields. Space prohibits further discussion

of these chapters, but I believe the overall point is clear: Sabom demonstrated to his own satisfaction (and mine as well) that the human personality *does* survive the death of the physical body. This is in the immediate and literal sense. How long that personality persists, and where it goes after leaving the body, were issues that Sabom's study did not and could not address. But the materialistic paradigm—that the brain generates the mind, that the mind is what the brain does—is completely inconsistent with Sabom's findings, as well with all other empirical NDE studies before and after his book was published.



To date, no one has demonstrated that these empirical findings are flawed in any way. Some do continue to attempt to disprove the validity of the NDE as a true experience, but they argue on a theoretical level only. Curiously, these skeptics continue to work on debunking the NDE while simultaneously ignoring the empirical data and replicable results that exist in the literature, especially Sabom's work. These skeptical researchers typically reduce the rich qualitative accounts of the NDE to an overly simplistic caricature of the core features, then explain away each individual feature out of context, and with a mosaic of theories rather than a comprehensive one. Such efforts reek of intellectual dishonesty, and do nothing to undermine the validity of the NDE.

Even more disconcertingly, many of those who believe as I do that the NDE destroys the materialistic paradigm appear to have neglected or forgotten Sabom's crucial work. In my estimation, *Recollections of Death* should have gone most of the way toward dismantling materialism and giving new directions for research into consciousness and the mind-body problem. The book should not stand on its own, of course, since replication in science is a vital step in testing a theory. But such replications have been performed, and Sabom's original work has been supported by later research. It is well past time to acknowledge the crucial nature of his book and investigate its implications.

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