

NEAR-DEATH EXPERIENCES: EXPLORING THE MIND-BODY CONNECTION by Ornella Corazza. London: Routledge, 2008. Pp. xi + 170. £17.99 (paperback). ISBN 0-415-45520.

As the title suggests, this book is concerned with the near-death experience (NDE) in relation to the mind-body connection, particularly in relation to Eastern, mostly Japanese philosophies, and it considers the similarity of NDEs with experiences occurring under the dissociative anaesthetic ketamine. These two separate approaches to the NDE issue were originally explored in depth as part of Corazza's recent doctoral thesis at SOAS in London and are now considered together in this book, though in a somewhat less integrated fashion than one might expect, as we shall see. Initially the book outlines some of the sticking points of mind-body philosophy, particularly what David Chalmers calls "the hard problem of consciousness" relating to how subjective experience arises from the objective activity of the brain. Taking as the starting point the Japanese philosopher Yuasa's conception of the whole mind-body, the introduction moves through Husserl's phenomenology to Varela's neurophenomenology, segueing into James's fields of consciousness and Sheldrake's extended mind theory, prompting Corazza to offer the notion of "the extended body" as an alternative. Incorporating, quite literally, Edward Hall's notions of the corporal extensions of humans, such as language as an extension of experience in time and space, and Weston La Barre's "evolution by prosthesis," such as the creation of submarines to allow underwater exploration, our author tantalisingly adumbrates the extended body in the Japanese tradition as a semidefinite and indefinitely varying body-space. We are also reminded that in the Eastern tradition we not only have a body but we are our bodies.

Having given the bones of the mind-body problem and the author's position on it, Corazza adds the flesh in the following chapter by providing an overview of the NDE phenomena, illuminating Ring's various stages on the way to entering the light. Consideration is also given to some of the arguments, and counterarguments, against taking these extraordinary experiences at face value. For instance, the cases of seemingly veridical out-of-body experiences (OBEs) on the operating table are dissected to a degree, and Blackmore's contention that the visual appearance of the medical setting can be recreated from the other senses, still available to the patient, is rebutted with Sabom's research demonstrating that resuscitation procedures are not easily imagined by people who have a cardiac arrest. It might have also been noted that Blackmore seems to want to have it both ways because in a later appraisal of the theory that NDEs are actually rebirth experiences, Blackmore is acknowledged for her insight that the visual system of a neonate is too underdeveloped to actually *see* a tunnel-like event at birth, though might they not reconstruct the visual experience from their other senses, supposedly much like those having NDEs while being resuscitated?

Many of the common features of the NDE are explored in further depth and illustrated with fascinating accounts from Corazza's own research, such as experiences encountering angels. But in trying to fathom the essential factors of the NDE, the author draws upon Kellehear's cross-cultural study to indicate that the transition to darkness and the meeting of beings are the only consistent features. In reflection of her own research, however, and by asking how the NDE is experienced, Corazza instead suggests that there are in fact three alternative cross-cultural features of the NDE: the first is that the experience is not a dream; the second is that the experiencers always travel to another place; and the third is that the NDE is one of the most important experiences in the person's life, and often life changing. This being the case, its not specified what then becomes of Kellehear's own universal NDE features.

Focusing on the second of her universal NDE features, in particular, the third chapter returns to the Japanese philosophies again to emphasize the importance of "place" as the subjective experience of space, identifying the relationship between body and space as a "state of between-ness." It's here, for me, that, in a rather zen manner, the definitions of concepts such as "dependent origination," *basho* (literally "place") and the "logic of place" became rather too minimalist and abstract, leaving me feeling somewhat disoriented when I encountered quotes like "... in order to perceive the object of intention, there must be something like a place, or a field of consciousness, which 'envelops' both subject and object from within" (p. 72). Nevertheless, the connection to fields of consciousness brought me back to familiar ground once again when Sheldrake's morphogenetic fields were discussed, leading gracefully into the vagaries of Grinberg-Zylberbaum, and the genius of Jung, Wundt, James, and Husserl, but soon taking a turn into odd territory once more. This time, Corazza draws upon

Bachelard for insight into pure experience, which had me wondering what was actually meant by the seemingly different terms of "soul" and "mind" being used, which had elsewhere in the book been used interchangeably, along with the terms "spirit," "consciousness," and "I." In fact, it's only in the penultimate chapter that we have any consideration given to the perplexing interchangeability of such words, and yet a little orientation at the beginning of the book about the many synonymous terms in use would have avoided some confusion.

The fourth chapter, entitled "Meeting God in a Nightclub," moves away from the mind-body philosophy and its labyrinthine terminology into the recreational and exploratory use of ketamine, which, when taken at subclinical doses, "... can produce effects similar to those described during an NDE" (p. 83). The idea that ketamine (K), mimics NDEs is not new; Grinspoon and Bakalar (1979) first suggested that the brain may make ketamine-like substances in times of stress, and Rogo (1984) indicated a possible neurochemical pathway for the NDE due to the resemblance of these experiences to some K experiences. However, little recognition is given to these earlier researchers, and instead reliance is made on Jansen's (1994) later and more complete theory, which combines both these previous ideas but topped up with some more advanced speculations about the neurochemical processes involved with this exogenous N-methyl-D-Aspartate (NMDA)-antagonist. Nevertheless, solid phenomenological research to support Jansen's theory has thus far been sadly lacking, so Corazza's work admirably continues with this line of reasoning by making a formal comparison of K-induced and non-K induced NDEs so that the apparent K-NDE relationship can be more properly scrutinised—research which has been overdue for more than 20 years.

This seminal systematic K-NDE comparison, seemingly published for the first time here, takes the form of interviews with two groups of 36 people, the first of which were collected by Peter Fenwick and consist of those having NDEs through cardiac arrest or other life-threatening circumstances, and the second of which comprises people having near death-like experiences on ketamine. It is not specified how the former group were sampled, but the latter group were taken from a group of 65 ketamine-using volunteers who had had a near death-like experience, and were selected for the final group of 36 only if they met Greyson's NDE scale criteria. Although the means of recruitment isn't specified clearly in the text, a request was made by the author for participants who felt they had had an NDE on ketamine. Later on, we learn that only about 12% of K-users are expected to have an NDE on ketamine, according to Jansen, so we are only dealing with a subsection of K-users—a point that could have been made much clearer. An account follows of the prevalence and quality of a number of features of the NDE among Corazza's select K group, and we find that many of these experiential features appear, both qualitatively and quantitatively (by percentage of the group reporting each experience),

to be very similar for both the K-NDE and life-threatening/cardiac NDE groups, at least for the experiences of time perception, visionary frequency, life review, understanding of the universe, sense of peace, vividness of the experience, extrasensory perception, and OBEs.

Unfortunately, the way in which the replies were reported left me with the question of whether or not the K respondents—most of whom had taken the substance between 10 and 2,000 times—were reporting their experiences in relation to a small number of specific NDEs that they had had with K or whether they were reporting features of experiences they had had with K generally. Given that this detail is unspecified, it is not entirely clear how much faith we can have in the *quantitative* comparison of the NDE features, given that no natural NDEer will have had 2,000 life-threatening experiences on which to base the comparative K-NDE report, coupled with the fact that only a few K-users report near death-like experiences. It's a lack of specific details such as this that make me wonder why this research has apparently not been published in a peer-reviewed journal prior to publication in this book. Important as this research is, gaps in the specified methodology may call for a reinterpretation of the results such that the prevalence of K-induced NDE features may not be as numerous as we are given to believe. Certainly Greyson-approved NDEs occur at least to some degree on ketamine, but the actual rate of occurrence may be considerably less on K than those occurring in genuinely life-threatening circumstances, such as with cardiac sufferers, say, but it is hard to tell from the details of the method given here. Qualitatively, however, these experiences certainly share many features in common.

There are, however, also certain experiential differences reported between the two groups. Ketamine users, for instance, were much less likely to encounter deceased or religious beings, which might have been attributed to the lack of genuine life-threatening circumstances with K, except for the fact that those in the K group were convinced that they were dead or dying. The experience of light was also much lower in the K group, although they were far more likely to report a sense of unity with the universe, with some even "taking part" in its fabrication. Finally, far fewer in the K group approached "a point of no return," possibly due to the foreknowledge that one was descending on a journey and should return, or possibly due to a lack of depth in that descent, dependent upon the dose. Despite the differences, however, the book reports two cases of people who have experienced both K and non-K NDEs who report that they are, experientially, the same.

In light of these findings, some speculation is given over to the authenticity of the K-induced NDE and its implications for the non-K NDE, taking in Fontana's point that K does not reproduce NDEs but merely facilitates them. Unfortunately though, it isn't stated directly whether or not the study reported in this book supports the similarity of K-induced and non-K induced NDEs to any comparable degree, but instead an elucidation

is made of some of the theories that have been put forward to explain NDEs generally, mistakenly considering Jansen's K-NDE theory to be neuro-reductionistic. Jansen (1997), in fact, suggested that his model does not preclude spiritual explanations and that he actually came to believe in a soul through his ketamine research. Nevertheless, ample space is given over to those perspectives that do run counter to mind-brain identity reductionism, such as those of Varela, Nagel, and Damasio, although this appears to be at the expense of the survivalist hypothesis of the NDE, which, surprisingly, receives rather less than a page. This lack of generosity appears to be because the survivalist hypothesis is considered to be inadequate in accounting for "... the cases of those who do not experience a state of temporary death ... in the ketamine study" (p. 124). However, as a medical doctor, Jansen has argued that there is no such thing as temporary death—you either die (permanently) or you don't—and that this distinction between K-induced and non-K induced experiences of near-deathness is ill founded. According to Jansen (1997, p. 87), "... there is no reason to suspect that the NDE mechanism would never be activated spontaneously" without the actual threat of death. And indeed Corazza acknowledges that NDEs can be triggered by various non-life threatening means, such as during rapid acceleration. Surely, then, ketamine also qualifies as an occasional NDE trigger, and perhaps the author would be in agreement with this, but her final position on the K-NDE association is not clear, so we can't be sure.

What is clear is that Corazza proposes a radical rethink to the way we conceptualise the mind-body relationship so that it is more in accord with Eastern philosophies, bringing the body back into focus in the debate. Again, however, we run into conceptual difficulties in discussion of Nagatomo's body-as-spirit theory as an alternative to dualism, because the term "spirit" is undefined, and without definitions, the theory begins to look like the mind-body identity reductionism we are warned off in the previous chapter. Other Eastern body perspectives are expanded upon, but it's Yasua's concept of the body as being composed of four main information subsystems that made its mark on me. The first three subsystems are the sensory-motor system, the kinaesthetic system, and the autonomic nervous system, but the fourth is composed of the unconscious quasi-body, which in Eastern traditions is referred to as "ki" (or "qi" or "chi").

As an extension to the mind-body relationship, the addition of the ki-energy body in this context rightly offers a new dimension to the debate, but sadly, I failed to see how these Eastern philosophies contribute "... a non-dualist, non-reductionist view of the NDE" (p. 1). For instance, Nagatomo seemingly takes on a classically dualist stance by stating that "... we must allow the body to speak to the mind. . . ." (p. 135), and Yasua similarly states that, "the *ki*-meridian system is related closely to both the mind and body" (p. 138), clearly indicating a traditional mind-body split, albeit with an added third element—the ki. What then do these Eastern perspectives offer to the NDE, and what do they have to say about the

ketamine experience? It's answers to these questions that I found hard to fathom because they are not explicitly stated.

Tantric philosophy, for instance, similarly proposes an energetic body, called Shakti, which complements and opposes consciousness, called Shiva, and although they are distinct, they are inseparable, as is found in the adage that "Shiva without Shakti is shaba (a corpse)." At death, it is said that both Shiva and Shakti (or sometimes Sha-"ki") leave the body, much like the ancient Egyptian tradition, which specifies that both the "ba" (consciousness) and "ka" (the energy body) leave the corporal body at death and progress to the after life. But, essentially, both these ancient mystery traditions view the mind and body as separate, with the energy body as a third factor connecting the former two. Regrettably, however, within the Eastern philosophies put forward in this book, an indication of the fate of the mind (or consciousness, soul, spirit, or I, depending on the page) at death or near death is never really forthcoming, nor is the bearing of such philosophies on the findings of Corazza's timely and fascinating ketamine-NDE research. This is somewhat disappointing, because the elaboration of the relationship of body to "place," the apparent insistence on a sense of place in NDEs, and the importance given to the energetic body could usefully offer something new to the NDE debate, but *what*, exactly, is never quite gleaned. Given that this was originally a PhD thesis, I get the feeling that this slim book has been rather too heavily edited and that the missing pieces of the jigsaw probably remain on the publisher's editing desk. Nevertheless, the remaining book certainly provokes much new thought on the ongoing NDE debate, but left this reader with more questions than answers, although perhaps that is appropriate.

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