

Near-Death Experiences, Deathbed Visions, and Past-Life Memories: A Convergence in Support of van Lommel's *Consciousness Beyond Life*

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ABSTRACT: This review supports cardiologist Pim van Lommel's continuity claim for human existence in his recently published book *Consciousness Beyond Life: The Science of the Near-Death Experience* (2010). Van Lommel and colleagues (van Lommel, van Wees, Meyers, & Elfferich, 2001) studied NDEs among 344 Dutch hospital patients who had been resuscitated following cardiac arrest. From their and others' NDE research findings (e.g., accurate perceptions during the arrest period), van Lommel and colleagues concluded that mental activity can take place even in the absence of cerebral function. Extrapolating from this conclusion, van Lommel claimed in *Consciousness Beyond Life* a fundamental continuity for individual human existence: that death and birth mark not final limits but instead the transition from one state of consciousness to another. In the course of making his continuity claim, van Lommel referred to other topics such as deathbed visions and past-life memories. In addition to reviewing NDE research, this article reviews research and illustrative responses pertaining to these related phenomena. A convergence of corroborative evidence is consistent with van Lommel's continuity claim.

KEYWORDS: Near-death experience; deathbed vision; past-life memory; consciousness; non-locality

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Pim van Lommel is a distinguished cardiologist, researcher, author, and lecturer with a particular interest in near-death experiences (NDEs). With colleagues (van Lommel, van Wees, Meyers, & Elfferich, 2001), he published in a major medical journal his longitudinal research on the correlates, contents, and aftereffects of NDEs. From the results of this and other NDE studies, van Lommel concluded that conscious mental activity can take place even in the absence of cerebral function. Extrapolating from this conclusion, he asserted in his new book *Consciousness Beyond Life: The Science of the Near-Death Experience* (2010) a profound existential and ontological claim: that human birth and death mark not final limits but instead transitions of the person from one state of consciousness to another. Is there a fundamental continuity to individual human existence?

As van Lommel acknowledged, the continuity claim for human existence is “nothing new” (p. 82). The view of humans as having a continuing, non-material essence has found advocates throughout human intellectual and religious history. The third-century neo-Platonist philosopher Plotinus posited that humans have souls that originate from and return to a timeless, unitary realm of light and truth. The continuity claim has also found expression in the works of philosophers, theologians, and mystics such as Baruch Spinoza, Meister Eckhart, Paul Tillich, John Shelby Spong, and Kahlil Gibran. Reincarnation in particular has been thematic to Eastern religions or traditions (Hinduism, Jainism, Tibetan Buddhism), ancient Egypt, most tribal traditions, Christian Gnosticism, Jewish mysticism, Norse mythology, and spiritualist literature such as that of theosophy and New Age.

Van Lommel is also not the first to base the continuity claim on research findings in psychology and other disciplines. Transpersonal psychologist Jenny Wade (1998) used NDE and ostensible prenatal memories to suggest that a transcendent source of consciousness “predates physical life at the moment of conception and survives it after death” (p. 249). Radiation oncologist Jeffrey Long (2010) concluded from a large online NDE self-report data base that “death is not an end but a transition” to an afterlife (p. 201). Edward Kelly and colleagues (Kelly, Kelly, Crabtree, Gauld, Grosso, & Greyson, 2007) argued the need for a twenty-first century psychology that can adequately accommodate many currently anomalous phenomena, including NDEs and deathbed visions. Their prototype toward a new psychological paradigm retrieved the insights of two of psychology’s founding figures, Frederick W. H. Myers and William James, and en-

compassed contributions ranging from process theology to quantum physics.

Yet something importantly new pertains to van Lommel's NDE research-based articulation of the continuity claim: in two words, *The Lancet*. The prior publication of his and colleagues' (van Lommel et al., 2001) large-scale prospective longitudinal study of NDEs in this prominent and prestigious medical journal renders his championing of the continuity claim particularly challenging to the mainstream academic and professional community.

The challenge meets understandable opposition. How can van Lommel or anyone justifiably use *near-death* studies to make claims regarding death and beyond? It has been said that an extraordinary hypothesis requires for its acceptance extraordinary evidence—and the continuity hypothesis would certainly seem to be extraordinary. Has not neuroscience established that mind or consciousness is totally a function of the brain—and hence cannot possibly continue once brain activity has ceased? What evidence could be extraordinary enough to challenge this established materialist view of mind *qua* brain—let alone support a leap into a claim for the existence of an afterlife? Does not such a claim drag scholars back to pre-scientific days of baseless belief, dogma, and superstition?

Yet as I will show, there is extraordinary evidence. And as the evidentiary base broadens, the existential and ontological claim becomes compelling. Although van Lommel (2010) based his continuity claim largely on NDE studies, he referred also to related existential phenomena such as deathbed visions or “nearing-death awareness” as well as past-life memories. Such related phenomena round out the picture and merit more extensive attention than that afforded in van Lommel's book alone. Accordingly, in this article I primarily review not only NDEs but also deathbed visions and past-life memories (cf. E. F. Kelly et al., 2007). I will illustrate the experiential “feel” of these phenomena as well as review corroborative and converging evidence.

Near-Death Experiences

Featured in *Consciousness Beyond Life* are basic contents and after-effects of NDEs, which van Lommel defined as “the (reported) recollection of all the impressions gained during a special state of consciousness” that “can occur during . . . a period of clinical death” (2010, p. 7). This special mental state entails “profound psychological events with transcendent and mystical” qualities (Greyson, 2000b,

p. 316). These psychological events are experienced from an out-of-body vantage point and can be categorized as *material* (perception of the ordinary phenomenal world, usually including seeing from an elevated vantage point one's physical body and its surrounding earthly situation), and *transmaterial* (perceived activity beyond the ordinary phenomenal world, such as movement through a dark region or void to an otherworldly, brighter realm; mentally communicating in that realm with a being or beings of light, deceased loved ones, or spiritual figures; reviewing events of one's earthly life; and reaching some border, limit, barrier, or juncture) (Holden, 2009; cf. Sabom, 1982). In combined or comprehensive NDEs, the transmaterial aspect of the experience typically follows the material aspect "in a continuous, unbroken sequence" (Sabom, 1982, p. 52). As I will elaborate below, material, transmaterial, and especially comprehensive NDEs (cf. Sabom, 1982) can have major and long-lasting effects on the experiencer's attitudes, beliefs, and behavioral lifestyle. Experiencers generally do not differ in demographic or psychological terms from non-experiencers (Fenwick & Fenwick, 1995; Greyson, 2000a; Holden, Long, & MacLurg, 2009; van Lommel, 2010).

As have others, van Lommel (2010) noted that NDE basic features and aftereffects "appear to be the same worldwide except for some culture-specific differences in content and interpretation" (p. 11; cf. Kellehear, 2009). Culturally contextualized ways of describing or interpreting the dark region, for example, include: tunnel, current of wind, narrow ravine, cave, well, trough, sewer, valley, and tube (Kellehear, 2009; Nahm, 2009). Whereas a rural Asian experiencer reported having emerged through the calyx of a lotus flower, an American truck driver recollected having been "shot through a tailpipe toward a brilliant light" (Cox-Chapman, 1995, p. 17) and an American child remembered moving through a noodle (Morse, 1999). Kellehear (2009) inferred that respondents from diverse cultures were "attempting to describe some kind of movement through darkness" (p. 152) and into some otherworldly, usually bright realm. Based on study of over 1,300 cross-cultural reports (spanning over 110 countries) at his research website, Long (2010) concluded: "Whether it is a near-death experience of a Hindu in India, a Muslim in Egypt, or a Christian in the United States, the same core elements are present" (p. 149).

Might this cross-culturally evident phenomenon be interpretable as mere hallucination or fantasy? After all, "the imagination can be made to produce realistic images that can be projected outward as though a part of the perceived world" (Blackmore, 1993, p. 69; cf. Whinnery,

1997). If NDEs are simply fantasies, they certainly are remarkable ones. Experiencers generally regard the experience as a distinctly real event in which they retained their personal identities. Those who remember their dreams or who have had hallucinations typically distinguish their NDEs as neither dream nor hallucination (Long, 2010; Ring, 1980; Sabom, 1982). One respondent said, “It was too real. Dreams are always fictitious. *This was me*, happening at that time and there was no doubt that it was reality” (Ring, 1980, p. 82). Some patients even describe the experience as “realer than here” (Sabom, 1982, p. 16; cf. Long, 2010). Intriguingly, unlike figures encountered in dreams or hallucinations, figures encountered during NDEs are almost always deceased (Long, 2010).

It is noteworthy that these phenomenally “real” experiences can occur during near-death. All of the 62 NDE (and 282 non-NDE) cases reported in van Lommel et al.’s (2001) study had been close to death. With the cooperation of 10 hospitals in the Netherlands, van Lommel’s research team interviewed these patients at several points following their resuscitations from cardiac arrest (as documented in electrocardiogram records), that is, clinical death (loss of respiration and blood circulation with consequent brain anoxia). The loss of respiration and blood pressure precipitates the loss of cortical and even brain stem function (Sabom, 1998; van Lommel, 2010). The brain is shutting down.

Could these phenomenally real perceptions be attributable, then, to disinhibitory effects of a dying brain or a brain under heavy medication (Blackmore, 1993; cf. Blanke, Ortigue, Landis, & Seeck, 2002)? The data do not support either attribution (Greyson, Kelly, & Kelly, 2009). In contrast to the “disorganized” thought processes associated with neural disinhibition, the recollections of NDE survivors are well-structured, lucid, and coherent (Parnia & Fenwick, 2002, p. 8; cf. Owens, Cook, & Stevenson, 1990). Nor is the NDE prevalence rate associated with the administration of pharmacological agents. The 27% of NDE respondents who had received “extra medication” during the cardiac arrest was comparable to the 25% of extra-medication administration among the non-NDE respondents (van Lommel et al., 2001, p. 2042; cf. Sabom, 1982).

Moreover, the occurrence of any perceptual experiences during clinical death—let alone lucid experiences—is difficult to explain. Although some undetected brain activity is possible during cardiac arrest, such “minute” activity “would be unlikely to lead to adequate electricity being generated for the brain cells to communicate with

each other” (Parnia, 2006, p. 94; cf. Kelly, Greyson, & Kelly, 2007). Although near-death is of course not death *per se*, the cardiac standstill, brain nonfunction, and sensory shutdown in cardiac arrest represent “the closest model [we have] to the process of dying” (van Lommel, 2006, p. 136; bracketed material added; cf. Parnia, 2006).

The anomaly must be emphasized. If human consciousness is totally dependent upon brain neuronal network activity, as adherents to the mainstream materialist view assume (see Tart, 2009), then should not the cessation of such activity preclude for *all* such individuals *any* psychological experience? And yet this extraordinary experience did occur for a substantial percentage (18) of van Lommel et al.’s cardiac arrest patients, a rate within the range of 11–43% found in longitudinal and retrospective studies (e.g., Greyson, 2007; Parnia et al., 2001; Ring, 1982; Sabom, 1980; Schwaninger, Eisenberg, Schechtman, & Weiss, 2002; see Zingrone & Alvarado, 2009).

Suggestive of a transcendent significance to these experiences is van Lommel et al.’s (2001) finding that the NDE becomes more likely as death approaches. Among their patients, those who died soon—within 30 days—after their cardiac arrests were more likely to have had an NDE: 21% versus 9% among matched controls. Even more intriguingly, the dead-soon-after proportion rose to more than a third—from 21 to 43%—among those patients who had had a “deep” or extensive NDE (p. 2041). Van Lommel (2010) suggested that the patients who experienced a “deep” NDE may have been more disposed to “let go” and die (p. 143). Van Lommel et al. also found that, among near-death experiencers (NDErs) who recovered from their near-death episodes, “deep” NDErs were more likely to report major life-changing aftereffects. Yet van Lommel et al. (2001) did not replicate previous findings (Ring, 1980; Sabom, 1982) linking NDE occurrence to other indicators of closeness to physical death such as duration of unconsciousness.

To consider further materialist or fantasy vs. transcendent interpretations of this cross-culturally evident, phenomenally real, lucid, and sometimes “deep” experience, I turn now to the basic features and aftereffects of the NDE as described in *Consciousness Beyond Life* and other works.

Core Features of Near-Death Experiences

The NDE contents reviewed in *Consciousness Beyond Life* entail both material and transmateral perceptual referents. Many of the exam-

ples were drawn from the van Lommel et al. (2002) study, in which content recollections remained consistent across 1–30 days, 2 years, and 8 years following the near-death episode (cf. Greyson, 2007). Van Lommel (2010) described 12 elements derived from Moody's (1975) original list: ineffability; a feeling of peace and quiet (the pain has gone); the awareness of being dead; an out-of-body experience; a dark space (the "tunnel" experience); perception of an unearthly environment; meeting and communicating with deceased persons; perception of a brilliant light or being of light; a panoramic life review; a preview or flash forward; perception of a border; and return to the body.

These elements relate to material and transmateral core features (cf. Sabom, 1982). As the following account will show, aspects of these contents are difficult to account for by happenstance or common knowledge. I will devote particular attention to: (a) material or phenomenal-world perceptions that have been verified as accurate; and (b) certain NDE transmateral or transcendent perceptions (deceased-person encounters, life review, border) that entail aspects difficult to explain by ordinary means.

Accurate material perception. NDE respondents often report—sometimes with independent corroboration of details—that they perceived their own bodies and environs from a position outside and typically above their bodies. In some instances, they report having seen persons or events in other locations. Reports indicating surprise, shock, or puzzlement seem particularly authentic (Gibbs, 1997). An oncology hospice worker hospitalized for acute leukemia recollected a sudden realization while scrutinizing a cardiac monitor hanging on the wall above the head of her hospital bed:

Oh, heart rate 200, 180, 200, blood pressure 40 over zero, and things are going off, and I'm thinking, "Wow, this person's really in serious condition," and then all of a sudden it dawns on me that *moi* [my body] is hooked up to this monitor! (Brown, 1994; cf. van Lommel, 2010, p. 21; bracketed material added).

After mentioning that "it took me a few moments to recognize myself," another experiencer exclaimed:

Boy, I sure didn't realize that I looked like that! You know, I'm only used to seeing myself in pictures or from the front of a mirror, and both of those look *flat*. But all of a sudden there I—or my body—was and I could see it. I could definitely see it, full view, from about five feet away. (Moody, 1975, p. 39)

Patients may recollect perceiving not only their own body but also surrounding persons, objects, and events. Particularly challenging is that many such perceptions—often of a highly specific and idiosyncratic nature—were subsequently corroborated as accurate by medical staff and others. In the van Lommel et al. (2001) study, a patient who had remained deeply comatose and under artificial respiration for days nonetheless upon recovering recognized the male nurse who had removed his dentures to prepare him for intubation. He asked him to return his dentures, correctly identifying their whereabouts (on a sliding shelf). He also accurately described details of the resuscitation room, the procedure, and the appearance of other staff members (p. 2041; cf. Smit, 2008a, Smit & Rivas, 2010). The fact that the denture removal occurred *during* the comatose period—and that the staff had not mentioned the removal—supports the inference that the patient’s perception occurred during the coma.

The incident that van Lommel and colleagues reported is not unique. Researchers have reported many other cases of verified perceptual recollections from experiences apparently taking place during deep anesthesia or near-death conditions (Long, 2010), and high proportions of the reported details have been independently corroborated (Holden, 2009). A 7-year-old girl, despite having been deeply comatose from having nearly drowned, nonetheless recalled idiosyncratic details of her emergency care such as her unusual intubation—nasal instead of oral. Much to her parents’ astonishment, she even recalled accurate details pertaining to her parents’ exact locations, clothing, and activities at home during her hospitalization (Morse, 1990, p. 7). One respondent was baffled regarding his extraordinary perceptual ability: “I just don’t understand how I could see so far” (Moody, 1975, p. 51; see also Farr, 1993, p. 25). Another recalled a moment of amazement as he was, during the experience,

thinking about my family, and suddenly finding my energy at home in my backyard, floating above the back porch and looking into the house through the kitchen window. There was a bird sitting on the window ledge. I was amazed that I could move so closely to it without its flying away (Ring & Valarino, 1998, pp. 15–16).

Weiss (2000; cf. van Lommel, 2010, pp. 23–26) reported the corroborated recollection of an elderly—and blind—woman who

suffered a cardiac arrest during her stay in the hospital where I [Weiss] was the chairman of the psychiatry department. She was unconscious as the resuscitation team tried to revive her. According to her later

report, she floated out of her body and stood near the window, watching [the resuscitation]. She observed, without any pain whatsoever, as they thumped on her chest and pumped air into her lungs. During the resuscitation, a pen fell out of her doctor's pocket and rolled near the same window where her out-of-body spirit was standing and watching. The doctor eventually walked over, picked up the pen, and put it back in his pocket. He then rejoined the frantic effort to save her. They succeeded.

A few days later, she told her doctor that she had observed the resuscitation team at work during her cardiac arrest. "No," he soothingly reassured her. "You were probably hallucinating because of the anoxia [lack of oxygen to the brain]. This can happen when the heart stops beating."

"But I saw your pen roll over to the window," she replied. Then she described the pen and other details of the resuscitation. The doctor was shocked. His patient had not only been comatose during the resuscitation, but she had also been blind for many years. (pp. 169–170; bracketed material added)

In a later publication, Weiss (2004) noted that "the cardiologist was still shaken days later when he told me [Weiss] about it. He confirmed that everything the woman related had indeed taken place and that her descriptions were accurate" (p. 10). Other cases of verified perceptual recollection by near-death survivors blind since birth have also been reported in the literature (Ring & Cooper, 1999).

In yet another case, a surgery patient under anesthesia and draped above the neck subsequently described leaving his body and watching the cardiac surgeon "flapping his arms as if trying to fly." The surgeon verified this description of his movements, explaining that in an effort to prevent contamination after scrubbing in, he directed staff in this way (Cook, Greyson, & Stevenson, 1998, pp. 399–400). A medical colleague of the surgeon's was exasperated: "So explain that to me. Explain that, through chemicals or some other [materialist] scientific explanation. Please explain to me why that man knows that" (Ling, 2008; bracketed material added).

Besides the denture removal incident in their own study, van Lommel and colleagues in the *Lancet* article—and van Lommel in *Consciousness Beyond Life*—refer to a case of veridical perception during a thoroughly documented near-death condition, namely, the case of Pam Reynolds (a pseudonym) (Sabom, 1998). Reynolds' comprehensive NDE occurred during six hours of major surgery that involved an hour of induced hypothermia with cardiac arrest. The surgery's aim was to remove a brain aneurysm so large as to be inoperable by

traditional procedures. Excision of the giant aneurysm required its collapse—“like a deflated balloon” (Sabom, 1998, p. 45)—as the blood in the arteries of the brain, and indeed the entire body, was drained “like oil from a car,” cooled, and temporarily stored in a machine (p. 43). Reynolds’ eyes were taped shut, ear canals occluded with fitted earplug “speakers” that emitted a rapid clicking noise for brain monitoring purposes, and body deeply anesthetized. Eventually, as her body temperature lowered and blood drained from her body, her heart stopped beating and her brain ceased electrical activity.

Not yet in induced hypothermia, although already under deep anesthesia as her skull was incised, she recollected leaving her body and “looking down”:

I [Reynolds] was the most aware that I think I have ever been in my entire life. . . . I was metaphorically sitting on Dr. Spetzler’s shoulder. It was not like normal vision. It was brighter and more focused and clearer than normal vision. (p. 41; cf. Long, 2010)

Reynolds reported that, from her elevated vantage point, she perceived numerous details, such as the pitch and shape of the cranial saw, her partially shaven head, and an assisting surgeon’s comment regarding the small size of her left-groin blood vessels—all of which were later corroborated by the medical staff. The recollection cannot be explained as fabricated from pre- or post-perceptions, given that the surgery room objects were not initially or post-operatively in view. Reynolds’ surgeon, Robert Spetzler, found Reynolds’ accurate recall “incredibly perplexing” (Benz, 2001). He explained: “The drill and so on, those things were. . . . in their packages. You really don’t begin to open until the patient is completely asleep so that you maintain a sterile environment” (Broome, 2002; cf. Smit, 2008b; Smit & Rivas, 2010; but see also Woerlee, 2010). Also, the assisting surgeon’s comment concerning Pam’s blood vessels occurred well into the procedure.

Reynolds’ accuracy corroborates an earlier finding by Sabom (1982; cf. Holden, 2009) of veridicality in near-death experiences. Before studying the phenomenon, Sabom had been convinced that the “near-death experience, if properly studied, could be reduced to a simple scientific explanation” (p. 175). At the onset of his first NDE study of hospital patients, Sabom

was anxiously awaiting the moment when a patient would claim that he had “seen” what had transpired in his room during his own resuscitation. Upon such an encounter, I [Sabom] intended to probe meticulously for details that would not ordinarily be known to nonmedical

personnel. In essence, I would pit my experience as a trained cardiologist against the professed visual recollection of lay individuals. . . . [In so doing,] I was convinced that obvious inconsistencies would appear which would reduce these purported “visual” observations to no more than “educated guesses.” (p. 83; bracketed material added)

Sabom interviewed 32 such patients. All of their accounts of hospital CPR procedure were accurate, including six particularly detailed recollections. The recollected details in each case were “fairly specific for the actual resuscitation being described and . . . not interchangeable with the clinical circumstances of other near-death crisis events” (p. 114). One patient did make apparent errors in describing the operation of a defibrillating meter—but then Sabom, to his astonishment, discovered that that description matched an older model that was “still in common use in 1973, at the time of [the patient’s] cardiac arrest” (p. 104). Given a traditional medical training similar to Sabom’s, van Lommel (2010) was also “more than a little surprised” by his patients’ reported NDEs (p. vii).

To establish a baseline rate of accuracy attributable to educated guesses, Sabom also interviewed a control group of 25 patients with comparable cardiac-related background and hospital experience but who had *not* reported an NDE. It should be noted that only 4 among the 25 control group patients had actually been resuscitated from cardiac arrest (Blackmore, 1985; cited in Holden, 2009). These 25 patients were asked what they would expect to see if they were to watch a hospital CPR procedure. The baseline rate of accuracy was low: Many (21) participants made at least one “major error” (p. 85) in their descriptions.

Consistent with Reynolds’ and others’ verified perceptions, then, the accuracy rate of the group reporting specific recollections was overwhelming and not readily attributable to projections from common knowledge. Such findings of accurate out-of-body perception have prompted a major collective (multi-hospital) effort to “test the reports of being able to see from above during a cardiac arrest through a technological refinement using random images that will only be visible from an elevated vantage point” (Parnia, 2006, p. 162). This project was still in progress as of the end of 2010.

Encounters with deceased persons. Recollected NDE perceptions may pertain not only to material but also to non-material or transcendent referents such as those involved in encountering a being of light or deceased persons, often close relatives, with whose thoughts and

feelings the NDErs “feel a strong connection” (van Lommel, 2010, p. 33). It is intriguing that child NDE survivors whose potentially comforting parents were present and highly salient nonetheless generally report having encountered such *deceased* loved ones (Greyson, 2000b; Long, 2010). Also intriguing is that these deceased figures seem to evidence a surprising or unexpected independence in their apparent role as guides or protectors. Pam Reynolds’ relatives “in the light” would not “permit [her] to go further” (Sabom, 1998, p. 44). Although Reynolds expected her grandmother to escort her on her return, her grandmother “just didn’t think she would do that.” Reynolds’ uncle instead escorted her and facilitated her return (Sabom, 1998, p. 46).

As noted, expressions of surprise or perplexity suggest an authenticity to NDE reports. An experiencer named Elinor remembered that her

father loved having friends and family around. The fact that it still seems odd to Elinor that her father would have turned down her company [“All he said to me was, ‘Sweetheart, don’t come’”] gives credence to the possibility that her vision is not simply a construct of her imagination. (Cox-Chapman, 1995, p. 134)

Another experiencer, a woman who had nearly died from sinus infection complications, also experienced surprise at the behavior of a figure she encountered. She recalled suddenly leaving her body and feeling “overjoyed to see” the much-beloved pastor of her church:

But he seemed very upset and had a very worried face and began waving his arms around, and he was just acting frantic. So I said, “Aren’t you glad to see me? I’ve missed you so much since you died last summer!” And then it hit me, and I said, “If you’re dead and I’m here with you, then . . .” And he started nodding his head frantically. Just as suddenly, I slammed back into my body. (NDE archives, 2003)

Particularly challenging to ordinary explanation are encounters with figures whose death is only subsequently revealed or identity only subsequently recognized. An NDE survivor named Sandra, who had contracted encephalitis and had lost (ordinary) consciousness, upon recovery drew a sketch of a girl she met during her coma.

When she told her parents what she was drawing, they became ashen and left the room. Later they returned and told her about the sister she never knew she had, who was struck by a car and died before she [Sandra] was born. (Long, 2010, p. 129; cf. van Lommel, 2010, pp. 32–33)

An adult whose NDE had occurred in childhood reported that while in the light, he became aware that

There were some presences there. There were some ladies. . . . I didn't know them at the time. . . . They were so loving and so wonderful and I just didn't want to come back. . . . I didn't see any pictures of them until I was an adult, but then I said, "Oh, yeah." They were my great-grandmothers who had died years before I was born. (Wilson, 1995)

Especially when tested under controlled conditions (see Tucker, 2005, pp. 150–173), such correct identifications are difficult to attribute to chance guesses.

Life review. Transcendent perceptions may include not only encounters with deceased loved ones but also a review of one's life events. Although evidence for the cross-cultural universality of the life review is mixed (see Kellehear, 2009, vs. Long, 2010), van Lommel (2010) included the life review as a core feature. Usually "in the presence of the light or a being of light," individuals "experience not just their every action or word but also every thought from their past life." They also "experience the effects of their thoughts, words, and actions on other people when they originally occurred," with an emphasis on "whether love has been shared or withheld" (p. 35). "People can talk for hours or even days about their life review, even though the cardiac arrest lasted only a couple of minutes" (p. 36). Lorimer (1990) suggested that the term "life review" be reserved for such morally impactful experiences, as distinct from flashes or fragmentary images from one's life sometimes reported as, for example, by fallen mountain climbers. A recovered heart patient experienced first life flashes and then a life review as his car rammed into the back of a truck:

When he realized that collision was imminent, the patient said that time seemed to slow down as he hit his brakes and went into an uncontrolled slide. Then he seemed to pop out of his body. While in this state, he had a life review which consisted of brief pictures—flashes—of his life. . . . His car struck the truck and the truck bed crashed through the window, causing multiple injuries to his head and chest. Medical reports show that he was in a coma and nearly died. Yet he had a vivid sensation of leaving his physical body and entering into darkness. . . . He had the feeling of moving up through a dark tunnel toward a point of light. Suddenly a being "filled with love and light" appeared to him. Now he had a *second* life review [or life review proper], one guided by the being of light. He felt bathed in love and

compassion as he reviewed the moral choices he had made in his lifetime. He suddenly understood that he was an important part of the universe and that his life had a purpose. (Morse, 1992, pp. 197–198; bracketed material added)

David Lorimer (1990) used the term “empathetic” to characterize those life reviews “in which people relive events through the consciousness of the person with whom they were interacting at the time” (pp. 1–2). One “feels the appreciation and gratitude of everyone you helped and everyone you have loved in a heightened way” as well as “the pain, anger, and despair of everyone you have hurt or betrayed, again magnified” (Weiss, 2004, p. 12). As one respondent put it, “I not only saw everything from my own point of view, but I also knew the thoughts of everybody who’d been involved in these events, as if their thoughts were lodged inside me” (van Lommel, 2010, p. 36). One individual exclaimed, “I was the very people I hurt, and I was the very people I helped to feel good” (Lorimer, 1990, p. 21; cf. Farr, 1993). Adding to these multiple vantage points—both self and others at the same time—is that of the reviewer, at his or her life review age, simultaneously looking down on the event. One NDEr described this observational perspective as a “third-person viewpoint” (Farr, 1993, p. 37).

An individual who had experienced such a life review reflected upon its significance:

I wish I could tell you how it really felt and what the life review is like, but I’ll never be able to do it accurately. I’m hoping to give you just a slight inkling. . . . Will you be totally devastated by the crap you’ve brought into other people’s lives? Or will you be . . . enlightened and uplifted by the love and joy that you have shared in other people’s lives? . . . You will be responsible for yourself, judging and reliving what you have done to everything and everybody in very far-reaching ways. (Farr, 1993, pp. 34–5; cf. Long, 2010)

Border and return to the body. Finally among NDE features is the transmateral experiencer’s typical encounter of a border or point of no return and hence a return to the body. Perhaps Reynolds’ deceased relatives in the light “would not permit [her] to go further” for good reason:

It was communicated to me—that’s the best way I know how to say it, because they didn’t speak like I’m speaking—that if I went all the way into the light something would happen to me physically. They would be unable to put this me back into the body me, like I had gone too far

and they couldn't reconnect. So they wouldn't let me go anywhere or do anything. (Sabom, 1998, pp. 44–45)

Whereas Reynolds encountered a prohibition against further travel “into the light,” others may “see a thick fog, a wall, a valley, a river, a bridge, or a gate” (van Lommel, 2010, p. 39) that they are not to traverse.

Reynolds recollected ambivalent feelings regarding her return. She explained: “I wanted to go into the light, but I also wanted to come back. I had children to be reared” (p. 45). In some instances, a being of light or a deceased relative or friend communicates to the experiencer that “their time has not yet come” or “they have a purpose in life” (p. 39). Intriguingly, return to the body seems to be experienced as return to a limited state of consciousness, a confined state of mind and sensation subject to physical pain. Van Lommel (2010) quoted one respondent's comment that “it was a real struggle to live my life inside my body, with all the limitations I experienced at the time” (p. 40). Reynolds recalled a reluctance when she

saw the thing, my body. I didn't want to get into it. . . . It looked terrible, like a train wreck. It looked like it was: dead. I believe it was covered. It scared me and I didn't want to look at it.

It was communicated to me that it was like jumping into a swimming pool. No problem, just jump right into the swimming pool. I didn't want to, but I guess I was late or something because he [the uncle] pushed me. I felt a definite repelling and at the same time a pulling from the body. The body was pulling and the tunnel was pushing. . . . It was like diving into a pool of ice water. . . . It hurt! . . . When I regained consciousness, I was still on the respirator. (Sabom, 1998, pp. 45–46)

Aftereffects of Near-Death Experiences

Given its extraordinary and emotionally powerful features—lucid perception in some special sense; encountering deceased loved ones; feeling drawn toward a warm, loving light; experiencing from multiple simultaneous vantage points the impact of one's past actions upon others; returning to the limitations of one's body; etc.—it is perhaps not surprising that the NDE—brief though it is—tends to have major, long-lasting aftereffects. By comparison with non-NDE survivors of close brushes with death, NDE survivors evidence, for example, significantly greater increases in love or acceptance of others, as well as a sense that life has meaning or purpose (Gibbs, 2010;

Ring, 1980, 1984; Sabom, 1982; Schwaninger et al., 2002; van Lommel et al., 2002). Greyson (1992–1993) concluded that the experience “appears to herald a wide range of pervasive and durable personality transformations, including a decreased interest in materialism and competition and an increased interest in altruism and spirituality” (pp. 81–82).

Particularly featured in *Consciousness Beyond Life* is the impact of the experience on attitudes toward life and death. In van Lommel’s own and others’ studies, researchers have found a significantly greater decline in fear of death as well as greater increase in belief in life after death among NDE (vs. non-NDE) survivors. NDE survivors attribute their attitudinal changes to their NDEs; for example: “The experience changed everything for me: there’s something after death, and it’s good. Death is merely a release from the body;” and, “I’m no longer afraid of death, because I’ll never forget what happened to me there. Now I’m certain that life goes on” (van Lommel, 2010, p. 47). Another NDE survivor learned that he “existed in some form before this lifetime” and that he “would continue to exist after it ended” (Ring & Valarino, 1998, p. 17). Yet another survivor recollected “immersion” in a peaceful, loving light and had a sense of continuing existence: that “I was always there and I will always be there, and that my existence on earth was just a brief instant” (Ring, 1984, p. 54).

Summary

Research findings pertaining to the NDE, then, would appear to challenge current views of the nature of mind or consciousness, in particular, materialist or fantasy interpretations of the NDE. NDE perception can be experienced even by persons blind since birth. Basic NDE features—albeit filtered through cultural and individual contexts—are cross-culturally evident. The phenomenon is not attributable to cortical disinhibition or medication; is typically experienced as real; may be surprising, puzzling, or amazing in certain respects; and becomes more likely as death approaches. Although brief, NDEs—especially “deep” NDEs—can have a major personal and attitudinal impact, including a decline in fear of death and a sense of continuity of one’s conscious existence and that love is primary. Detailed out-of-body descriptions of persons, objects, or events—some reported by persons blind since birth—have been corroborated as accurate. Transcendent visions may include encounters with figures whose death or identity is only subsequently revealed.

Deathbed Visions

Although van Lommel based his *Consciousness Beyond Life* claim mainly on his and others' findings concerning NDEs, he did describe or note in passing a number of related phenomena. One such phenomenon has been variously termed deathbed visions (Osis & Haraldsson, 1977), nearing death awareness (Callanan & Kelley, 1992), and, more broadly, approaching-death experiences (Fenwick, 2005; see E. F. Kelly et al., 2007). Deathbed visions have been reported across age, gender, nationality, religious tradition, and culture (Barrett, 1926; Osis & Haraldsson, 1977). Hospice care providers, family members, and others who have been around the dying suggest that such experiences are not uncommon. They can even occur among individuals with mental disabilities or disorders, a phenomenon sometimes referred to as terminal lucidity (E. W. Kelly, Greyson, & Kelly, 2007; Nahm, 2009). Despite some substantial research contributions (e.g., Osis & Haraldsson, 1977), "better, more systematic, and prospective research is needed to improve our understanding of the incidence, content, and effect of deathbed visions" (van Lommel, 2010, p. 311).

Deathbed visions entail differences as well as remarkable commonalities with NDEs. Whereas NDEs occur during a sudden near-death event such as cardiac arrest or serious accident,

Nearing Death Awareness develops in people dying slowly of progressive illnesses, such as cancer, AIDS, lung disease. For these people the process of leaving this world and experiencing a new one is more gradual. Rather than being in this world one moment, gone from it the next, then jerked back to life, the dying person remains inside the body, but at the same time becomes aware of a dimension that lies beyond. Rather than switching abruptly from one world to another, dying people apparently drift between the two. Instead of seeing their lives flash past, dying people seem to have more time to assess those lives and to determine what remains to be finished before they die. (Callanan & Kelley, 1992, pp. 16–7)

In addition to the more gradual tempo and in-body vantage point, "the dying person [in contrast to the NDEr] experiences waking consciousness during the deathbed vision and can discuss the enhanced and nonlocal consciousness at about the same time as they experience it" (van Lommel, 2010, p. 310; bracketed material added).

Despite these differences, nearing death awareness resembles the NDE phenomenon in a number of important respects. Like NDEs, nearing death visions can be quite coherent or lucid and are experi-

enced by the dying person as real events that are happening to them. The core features of deathbed visions—otherworldly visions of light, vivid or bright landscapes, and deceased loved ones or other figures—strikingly resemble those of transcendent NDEs. The cross-cultural breadth of these features has been noted. Just as NDEs become more likely or “deep” (e.g., traveling toward light) as death approaches, nearing death visions occurring shortly before death become more suggestive of a transitional purpose. In one large-scale, cross-cultural study, over three-fourths—76%—“of those who died almost instantly (within ten minutes) after seeing the apparition . . . said that the apparition had come ‘to take them away.’ Of those who died after a period of one hour or longer, the percentages varied from 44 to 25 percent” (Osis & Haraldsson, 1977, p. 30).

As with NDEs, deathbed visions can have a dramatic impact despite the brevity of the visionary episode itself. In the Osis and Haraldsson (1977) study, half of the reported visions lasted 5 minutes or less. The visions typically elicit emotions of joy, elation, serenity, or peace, and can “take away the fear of death” (van Lommel, 2010, p. 310). Although the overall transitional process may be gradual, the impact of deathbed visions—often involving a welcoming or beckoning deceased close relative—can be immediate. A 60-year-old woman who had been suffering from a painful cancer had a vision of her deceased husband preparing to help her join him. According to the medical attendant, “before [the vision], she was [in pain and] depressed about conditions getting worse.” During the vision and afterwards, “she was elated, seemed to have risen above pain, no more moaning” (Osis & Haraldsson, 1977, p. 69). Those experiencing such visions typically indicate a willingness to “go” with the perceived visitor.

Nearing death visionaries often indicate a need to embark upon a journey. As with the tunnels, tailpipes, or flower stems of NDEs, the imagery of movement in nearing death awareness is influenced by individual and cultural context. The dying individual, depending upon life history and cultural familiarity, may indicate a need to board an about-to-depart bus, airplane, or boat—imagery that might be more likely among former bus drivers, pilots, or sailors, respectively—or to mount a horse—more likely among equestrians. An Indian woman in a deathbed vision anticipated travel atop a cow (Osis & Haraldsson, 1977). A dying woman whose frequent world travel “had been full of ticket lines, baggage lines, and passport lines” had a vision indicating her need to “get in line” in order to join her deceased daughter (Callanan & Kelley, pp. 6, 9).

Like NDEs, nearing death awareness is not readily explainable in terms of prior medication, clinical hallucinations, or psychological expectancy. In the Osis and Haraldsson (1977) cross-cultural study, terminal patients who had received medication were no more likely to have a nearing death vision—often involving a coherent perception of a deceased close relative—than patients who had not received medication. Moreover, “hallucinations of mental patients and drug- [or fever-] induced visions seldom portrayed close [deceased] relatives” (p. 185; bracketed material added) and lacked the coherence of the deathbed visions. Finally, the deathbed visions did not relate “to indices of stress, expectations to die or to recover, or the patient’s desire to see a person dear to him” (p. 188). Indeed, “instead of expressing the desires and inner dynamics of the patients,” the envisioned entities seemed “to show a will of their own” (p. 87), much like transcendent NDE figures.

Also like NDE figures, nearing death apparitional visions sometimes entail information that could not have been known by ordinary means. The experiencer may see—often with some surprise—recently deceased loved ones whose deaths were unknown to them (Barrett, 1926; Callanan & Kelley, 1992; Greyson, 2000b). Callanan and Kelley (1992) recounted the case of a dying 91-year-old woman, Su, whose visions began to include not only her late husband but also her sister:

“Why is my sister with my husband?,” she asked. “They are both calling me to come.”

“Is your sister dead?,” I [Callanan] asked.

“No, she still lives in China,” she said. “I have not seen her for many years.”

When I related this conversation to the daughter [Lily], she was astonished and tearful.

“My aunt died two days ago in China,” Lily said. “We decided not to tell Mother—her sister had the same kind of cancer. It was a very painful death; she lived in a remote village where good medical care wasn’t available. We didn’t want to upset or frighten Mother, since she is so sick herself.” . . .

When Lily tearfully told her mother about her sister’s illness and death, Su said, with a knowing smile, “Now I understand.” Her puzzle solved, she died three weeks later, at peace and with a sense of anticipation. (pp. 98–99)

Another instance entails two former neighbors and swimming buddies, Ralph and Steve, who hadn’t seen each other for years. Unknownst to Ralph, who was dying of cancer, Steve had recently died from pneumonia in the aftermath of a tragic accident. “Just before he

[Ralph] died—and just after Steve had died—Ralph sat up. ‘Oh, look!’ he said excitedly. ‘Here comes Steve! He’s come to take me swimming’” (p. 90).

The details of some deathbed visions may be premonitory or precognitive. A nine-year-old girl dying of brain cancer

had a dream . . . in which men wearing grey suits were taking her to a big ivy-covered house. She described the house in detail—red brick, polished wooden doors, ivy curling around the windows. . . . [She was] looking very puzzled.

. . . In the other room I found [Jenny’s mother] Pauline and [Jenny’s father] Matthew crying in each other’s arms.

“That house that she’s talking about is the funeral home in Ohio where we’re going to have her body sent,” she [Pauline] said. . . . At first they [Pauline and Matthew] wondered if Jenny could have overheard them talking about the funeral and burial. Then they remembered they had talked about the funeral home by name, not describing it. Jenny didn’t know their hometown well, and had never been to the funeral home—or even near it—as far as they knew. (Callanan & Kelley, 1992, p. 202)

In contrast to the in-body vantage point emphasized in Callanan and Kelley’s “nearing death awareness” definition of deathbed visions, Fenwick’s (2005) broader construct—which he termed “approaching death experiences”—does include out-of-body experience. For example, there may be “visits . . . to friends or relatives at the time of death” (p. 151). Such visits from the vantage point of the recipient have been called after-death communications (Guggenheim & Guggenheim, 1995) as well as perimortem or postmortem experiences (van Lommel, 2010). A nurse recounted this experience:

I was working in an extended care facility. Some of the patients were up and about, and Roland was one of those. We developed a special rapport. I realized he needed to feel needed, so I gave him little jobs to do, and he always seemed thrilled to do them.

One morning between 6:00 and 6:15, I was getting ready to go to work. I sat on the edge of my bed to put my shoes on. I turned my head and saw a faint vision of Roland standing at the foot of the bed, smiling! I recognized his face instantly. He looked happy and relaxed.

I thought I was going off the deep end! I smiled back at him, and then he was gone. I sort of laughed and said to my husband, “I’m really cracking up now. I’m not even at work yet, but I saw one of my patients standing here!”

I went to work, and when I walked in, they told me that Roland had died of a heart attack during the night. I had the feeling that he had

come to let me know that he was all right. (Guggenheim & Guggenheim, 1995, p. 217)

The aspects of such accounts that are challenging, of course, are the absence of any notification of death as well as the temporal coincidence between the visit and the time of the death. In some cases, the visit and death are documented as having taken place at precisely the same time (Fenwick, 2005; Guggenheim & Guggenheim, 1995).

Past-Life Memories

According to van Lommel's claim, death and birth occasion not finalities but instead transitions of human consciousness, mind, or personhood to some transmaterial state, mode, or realm of existence. In investigating the bases for his claim, it was helpful to examine not only NDEs but also the related anomalous phenomenon of deathbed visions as well as other death-related phenomena such as perimortem experiences. Such phenomena pertain to the end of an individual human life, one's death and beyond—as it were, one's *exit*. What then about one's *entrance*, one's *birth* and *before*? Also pertinent to van Lommel's claim are anomalous phenomena pertaining to the other end of earthly life. Van Lommel refers, for example, to perinatal and past-life memories. After describing briefly some challenging research results concerning perinatal memories, I will turn to the extensive literature on past-life memories—both spontaneous recollections of young children and induced “regression” memories of patients.

Some studies have documented cases of spontaneous memory of events during or preceding birth—surprising given the typical condition of infantile amnesia (Loftus, 1993). Much like the details of NDE recollections, “detailed reports [of prenatal or perinatal events], including descriptions of the people present, what they were wearing, and procedures and instruments used, have been collected and verified by third parties” (Wade, 1998, p. 258). The reports involve not only young children's spontaneous recollections but also older subjects' recollections during therapeutic or experimental hypnotic conditions. For example, a 13-year-old girl under hypnosis recollected a scene in which her pregnant mother-to-be was sitting on a couch in a green dress, knitting something for a girl baby, and telling her father-to-be: “It's a girl. I know it's a girl. It *has* to be a girl.” Her mother remembered that incident and corroborated the details (Cheek, 1986, pp. 106–107). Other examples included accurate recollections of at-

tempted abortions that had been kept secret from the child. One participant saw under hypnosis her birth as a twin and that her sister was stillborn; her parents had never told her but confirmed the fact upon questioning (Weiss, 1996).

As with NDE life review respondents, people reporting perinatal memories sometimes express puzzlement at having been able to perceive from multiple vantage points:

At times I feel like I'm somewhere in the room witnessing what is going on, and at other times I am the child and seeing it from that point of view. . . . I wonder how come I can see around behind him. (Chamberlain, 1998, p. 187)

Another reported: "I keep looking through the nursery window; it's weird. I can't be on both sides of the window! I'm looking at the baby; it's me" (p. 188).

To further assess the accuracy of such reports, Chamberlain (1998) used hypnotic regression techniques to elicit birth memories from 10 mothers and then, independently, from the corresponding 10 children—cases in which the mothers recalled never having told their children any details of their children's births. "Generally, reports validated each other in many details like time of day, locale, persons present, instruments used (suction, forceps, incubator), and type of delivery (feet or head first)" (p. 106). One mother in hypnotic regression said: "I pick her up and smell her. I smell her head. I look at her toes and say, 'O God! She has deformed toes.'" The mother asked the nurse, who reassured her that the toes were all right. Independent of the mother's report, the child recollected:

She's holding me up, looking at me. . . . She's smelling me! And she asked the nurse why my toes were so funny. . . . The nurse said that's just the way my toes were and that they weren't deformed" (pp. 107–108).

This section addresses not perinatal or prenatal memory so much as past-life memory. Chamberlain (1998) serendipitously encountered some such memories in the course of his regression work on perinatal memory. One 11-year-old declared:

I can't [re-experience my birth]. I'm out, but it's dark. I'm dead. . . . All these people around me were crying. I'm not breathing. . . . Now they are putting me in a box, a black box. . . . It is 1840. The West. There are cowboys there. (p. 190; bracketed material added)

Another participant "was troubled by flashbacks of drowning at his birth." The flashbacks seemed to refer to the end of a previous life:

I see in my mind this wall, a castle or fortress wall, and I see myself falling into the sea, drowning. I was up on this wall. . . . a grown man, about thirty . . . depressed, troubled . . . I am gasping for air. (pp. 190–191)

Past-life flashbacks are also sometimes experienced during the course of NDEs, as van Lommel noted: “Some NDEs involve the experience of what appear to be previous lives cut short by a violent death. . . . I [van Lommel] have come to believe that memories of a previous life are possible” (van Lommel, 2010, p. 334).

Like perinatal or prenatal recall, the past-life recollections studied have been both spontaneous and evoked under hypnotic induction. Over the course of several decades, psychiatrist Ian Stevenson and colleagues investigated over 3,000 cases of spontaneous past-life memory, mostly among young children. Although infrequent, the cases were not rare. The children were mainly in India, but cases in Africa, South America, Turkey, and the U.S. were also investigated. Stevenson and colleagues (e.g., Pasricha, 2008; Stevenson, 2001; Tucker, 2005) found extensive independent corroboration by informants of the children’s detailed recollections.

ABC’s television show *Primetime* (Taylor, 2004) featured the case of a young child named James Leininger with an unusual knowledge of airplanes whose play prominently featured piloting toy aircraft—especially preferring vintage model planes and “crashing” them such that the propellers broke off—and drawings of plane crashes. At two years of age, James began having repeated nightmares of having been shot down in a plane he was piloting. Asked who shot down his plane, James replied, “the Japanese.” He recollected details: the name of the Navy pilot (James Huston, “me”); the name of the aircraft carrier; the names of the pilot’s squadron mates; the type of plane (a Corsair); the plane’s idiosyncratic characteristics (vulnerable tires on landing, leftward bias on takeoff); the exact manner of the hit (into the engine, taking off the propeller); and the location of the fiery crash. All these details were subsequently corroborated as accurate by records as well as by the report of a surviving member of that World War II squadron who had flown on that mission with that pilot (Leininger & Leininger, 2009; Taylor, 2004). As James was reassured by therapist Carol Bowman (1997) that he was “safe” now, his nightmares gradually subsided.

Stevenson and colleagues preferred to investigate such spontaneous memories among young children, arguing—as did Melvin Morse with NDEs—that their memories are less likely to be adulterated by

cultural and other contextual influences. The spontaneity of the data also rendered such reports preferable to responses induced under hypnosis, which can be more vulnerable to distortion and fabrication:

Hypnosis [can] produce fantasy materials. Under hypnosis, the mind tends to fill in the blanks. If a person is being asked to give details that he or she does not remember, the mind will usually come up with some. Once this has happened, the person may then have great difficulty distinguishing actual memories from fantasy ones. (Tucker, 2005, p. 226; cf. Fenwick & Fenwick, 1999; Loftus, 1996).

Nonetheless, as with the corroborated prenatal recollections and spontaneous past-life memory cases, hypnotic regression “can [also] lead to some remarkable [verified] memories” (Tucker, 2005, p. 225; bracketed material added). The case of a British woman, Jenny Cockell (1993), involved corroborations of both spontaneous and induced memories. Instead of the usual case in which memories fade in later childhood, Jenny’s memories of a past life in Ireland persisted through adolescence and into the adult years. Even in earliest childhood, Jenny had memory fragments of life in a small Irish village as a woman named Mary who had died 21 years prior to her birth as Jenny in 1953. Her childhood dreams were “swamped” by “a jigsaw of past-life memories” (p. 1). Although also having pleasant memories, she especially remembered her death and her fear for the welfare of the children whom she was leaving behind. She had “strong” and fairly detailed memories—later corroborated—of a small cottage, front gate, lane, and village called Malahide with its shops, railroad station, and swampy area.

Some memories and feelings were puzzling. For example, she could not understand why she felt as a child that her skirts were too tight and short “to be comfortable” (p. 9). Also, she would remember “waiting at dusk on a small wooden jetty for a boat to come . . . wearing a dark shawl which did not keep out the cold wind”—but she could not remember for whom she was waiting.

Whereas vintage model aircraft figured prominently in young James’s child play, Jenny’s play centered around cottage work characteristic of an older era:

Mary spent much of her time in the kitchen cooking, which seemed to involve a lot of boiling on something completely unfamiliar to me as a child – a kitchen range of a type that I [Jenny] did not see until adulthood and may still be found in some old houses. She also frequently made a round flat loaf of bread, mixing flour with her hands. I would echo this in childhood play, mixing grass seeds with water. . . . My

mother had a vacuum cleaner and rarely used a broom, but I would enjoy cleaning in that older way, without machines. (p. 4)

Similar to near-death and deathbed experiencers' sense that their experiences were real, Jenny "had no cause to doubt that these memories were real" and even "assumed that memories of this kind were normal" until learning otherwise to her "great shock" (p. 12). As an adult, Jenny gained an opportunity to find out more about her past life—and eventually reunite with her past-life children—by working with a hypnotist who practiced past-life regression. As with NDE and perinatal memories, her hypnotically induced past-life memory entailed multiple vantage points of time and space:

It was as though I were a spectator, existing partly in that place I could see, and partly in the present. . . . Yet I [Jenny] was Mary, and the past had become very real. . . . Although I knew he [the hypnotist] was asking the questions, it seemed that it was my other self who answered, because now I was Mary. . . . Looking down at my clothes, I heard my dissociated voice answering [a question as to what I was wearing]: "A long dark wool skirt and an apron. The apron is not so long but the skirt nearly reaches the ground." (pp. 35–36; bracketed material added)

To fulfill her desire to find the children she had left behind, Jenny travelled to Malahide, where she confirmed most of her impressions and did find two of her children—then adults, indeed, old enough to have been Jenny's parents. Jenny's narrating of her reunion with one of her "children," named Sonny, was particularly intriguing for its corroboration: "When we discussed Mary's waiting on the jetty, alone and at dusk, Sonny became really animated. . . . It [the jetty] had once been wooden, as I had described." Still "animated," Sonny explained the circumstances: "I'll tell you why you remember that jetty," said Sonny. "As a boy I used to caddy on the island for the golfers, and at dusk my mother would wait for me on the jetty so that we could walk home together" (p. 120).

Particularly shocking to Sonny was Jenny's description of an incident involving a rabbit caught by one of the family snares set in the woods:

I described the position of the snare, adding that it was early morning and that Sonny was about eleven [years old]. . . . I had thought that the hare had still been alive when it was found. Under hypnosis I had said simply: "It's still alive!" That afternoon Sonny told me that it had been. This was clearly the first piece of information that had really shocked him by its accuracy. The incident was so private to him and his family, how could anyone else know about it? (p. 121)

Jenny's reunion visits, especially with Sonny, finally brought her some peace and closure concerning her memories. A corroborating interview with Sonny was featured as a documentary by the BBC. Jenny's story was depicted in a CBS made-for-television movie (Flynn, Holmes, & Dunne, 2000).

Corresponding to Jenny's contact with Sonny was a contact between young James Leininger and James Huston's elderly surviving sister:

When they spoke on the phone, Anne felt a great affection for James. He called her "Annie." Only her dead brother had called her Annie. Andrea [James Leininger's mother] thought it was somehow disrespectful, but James insisted that Annie was her name. And he told Andrea that he had another sister, Ruth. . . . James recalled in surprising detail when his [James Huston's] father's alcoholism got so bad that he smashed things. . . .

The accumulation of family minutiae that they discussed over the phone was stunning and, over time, left Anne Barron [James Huston's sister] without any doubt about James' true identity. Clinching it was the inexplicable matter of the picture. Their *mother*, Daryl, was a gifted artist, and Annie had sent James a portrait that Daryl had made of her brother as a child.

"Where's the picture of you?" James asked when he got it, and the question took Annie's breath away. Only she knew that Daryl had painted twin portraits—Annie and James—and the second portrait of Annie was up in her attic. No one in the world knew about it except her. (pp. 236–237)

The corroboration of Jenny's and James' past-life memory details is not unique. Psychiatrist and regression therapist Brian Weiss (2004) claimed that "hundreds of other therapists have taped thousands of past life sessions, and many of their patients' experiences have been verified. I myself have checked specific details and events" (p. 9). He has

seen patients remember a name during the recall of a recent lifetime and subsequently find old records that validate the existence of that past-life person confirming the details of that memory. Some patients have even found the graves of their own previous physical bodies . . . [and] . . . speak portions of languages that they have never learned, or have never even heard, in their current lifetimes. (p. 27)

Weiss (2004) also claimed that his patients who describe the end of a past life "use the same images, accounts, and metaphors as do the children and adults who have had an NDE" (p. 17). For example,

Andrea, a news reporter for a major television network, allowed me to regress her as a demonstration and described her life as a Great

Plains farm woman in the nineteenth century. At the end of her long lifetime she floated above her body, watching it from afar. Then she felt she was being drawn up into a light, in her case a blue one, becoming increasingly distanced from her body and going toward a new life, one that was as yet unclear. This is a common, almost classic near death experience except that Andrea was describing the experience of someone in a past life—herself—who had been dead for more than one hundred years. (p. 11)

Another regression patient reported:

I have left my body. . . . I see a wonderful light. . . . There are people coming to me. They are coming to help me. . . . The light is so brilliant! Everything comes from the light! . . . It's like a power source. . . . You're among your friends. They are all there. I see many people. Some are familiar, others are not. But we're there, waiting. (Weiss, 1988, pp. 82–83)

In the spontaneous past-life memory case described earlier, young James was asked one day by his father, “Hey, how come you named your GI Joes Billy and Leon and Walter?” James replied, “Because that’s who met me when I got to heaven.” Billie Peeler, Leon Conner, and Walter Devlin were among James Huston’s squadron mates; their deaths shortly preceded his on March 3, 1944 (Leininger & Leininger, 2009, pp. 157–158).

Weiss (2004) concluded from such cases that “just before we die, our soul, that part of us which is aware when it leaves the body, pauses for a moment, floating. In that state it can differentiate color, hear voices, identify objects, and review the life it has just departed” (p. 9). After pausing, that aware part of us can “travel,” encounter deceased loved ones, etc. The light encountered, Weiss (2000) asserted, is the same as that “seen and felt by people during the NDE” (p. 152).

Weiss (1992) also compared past-life regression therapeutic results with NDE aftereffects. Both groups share benefits such as “increased awareness or spirituality, decline in materialistic worries, the development of a more loving, peaceful nature, . . . a dramatic lessening of the fear of death and . . . the new and certain conviction that love is what really matters” (p. 51)

Discussion and Conclusion

This review of pertinent research supports Pim van Lommel’s ontological and existential claim in *Consciousness Beyond Life* (2010) for a transcendent continuity of human mind and personhood. The materialist view of mind as totally reducible to brain represents an

assumption rather than an established neuroscientific fact (see E. F. Kelly et al., 2007). This assumption appears to be challenged by the anomalous evidence I have reviewed. Conscious mental activity in the absence of cerebral function (van Lommel et al., 2001) may be not only possible but more than momentary. Indeed, human consciousness may extend beyond earthly life, as van Lommel asserted in his book title. In this final section, I ponder the broad yet converging findings that lead to this conclusion.

At the very least, the findings and phenomena are intriguing. All of the phenomena have been evident across diverse individuals and cultures and, for that matter, across eras of recorded human history. NDE recollections are consistent across days, weeks, or years following the event. The fact that young children's NDEs evidence the same core features as those of older respondents suggests that cultural influences do not determine the experience. Participants experience the events as real happenings in their present or past lives. NDErs generally report heightened awareness and lucidity, characterizing their experience as real and distinct from dreams or hallucinations. Most of the figures encountered in the phenomena are deceased loved ones, despite the salience of living loved ones in the participants' contemporaneous circumstances. The figures seem to evidence an autonomy or independence uncharacteristic of the (mostly living) figures entailed in dreams or hallucinations. NDEs and deathbed visions are not associated with psychopharmacological medication. They become more likely—and, indeed, NDEs are more extensive and deathbed visions are more explicitly experienced as transitional—as death approaches. Despite their brevity, the experiences have a major impact such as declines in fear of death and self-aggrandizing concerns. The temporal coincidence of death with a “visit” to a loved one in perimortem experiences is uncanny.

Interestingly, NDEs, deathbed visions, and perinatal or past-life memories sometimes overlap or interrelate, as if they were “cut from the same cloth” (Melvin Morse, personal communication, October 7, 2010). Dying persons may report NDEs and subsequently experience, as death is near, congruent deathbed visions. An investigator (Chamberlain) of perinatal memories serendipitously encountered cases of patients under regression describing not birth but instead past-life (or past-death) memories. Patients regressed under hypnosis often describe past-life deaths reminiscent of NDEs such as floating out of their bodies toward a light. Conversely, an NDEr at the start of his NDE perceived “images of . . . two previous lives” as well as of his birth

(van Lommel, 2010, pp. 36–37). NDErs sometimes recollect a sense of the continuity of their existence; as noted, one NDEr characterized earthly life as “just a brief instant.”

Also noted was that expressions of surprise or bafflement lend a ring of authenticity to the experiences. NDErs may be surprised or shocked upon recognizing their three-dimensional body, baffled by how they can see so far or from multiple vantage points, or perplexed that a normally welcoming (now deceased) loved one is discouraging their approach or farther movement. Deathbed visionaries may be puzzled by the sudden appearance of a loved one until that person’s recent death is revealed. “Secondary” surprise (see Gibbs, 1997) and even shock or exasperation may be evident among those who hear the reported perception, vision, or memory and recognize its accuracy.

The case progresses beyond intrigue, overlap, and surprise, then, to inexplicable accuracy. Medical professionals—for example, M.D.s van Lommel, Chamberlain, Greyson, Long, Moody, Morse, Sabom, Spetzler, Stevenson, Tucker, and Weiss, and R.N.s Callanan and Kelley—reported independent corroborations of the verifiable details of patients’ perceptions. The accuracy of idiosyncratic details in the recollected out-of-body perceptions of NDE survivors has been confirmed in many cases, even cases of individuals blind since birth. How is this accuracy possible given the documented absence of detectable brain wave activity, as in many cardiac arrest cases? Although near-death is not death, the processes entailed in conditions such as cardiac arrest approximate those entailed in actual death. Moreover, transcendent NDE respondents as well as deathbed visionaries have seen figures whose recent deaths could not have been known to them. Unfamiliar figures are sometimes subsequently recognized in a family portrait or photograph as loving relatives. Premonitory or other information has been found to be accurate. Past-life memory details have been confirmed by pertinent individuals still alive and involved with the alleged past life.

Although consistent with extensive converging corroborative and other evidence, the continuity claim for human existence may remain controversial for some time. Van Lommel (2010) acknowledged that the discovery of a transcendent consciousness still leaves “many fundamental questions . . . unanswered” (p. 134; see, for example, Gibbs, 1999, 2005a, 2005b; Sabom, 2005). I address two such questions. First, only *some* of those resuscitated from near death, on their deathbed, or still in young childhood evidence these experiences; the great majority of individuals do not. Why not? Do some individuals

have a lower threshold for a “split” of mind from brain (Sabom, 1982, p. 183), such that they experience more ready access to a spiritual source of their consciousness or identity? In Osis and Haraldsson’s (1977) words, do the souls of some individuals begin more readily to disengage or disembod from “bodily processes” (p. 128) as death approaches? Such an explanation seems plausible but remains, at this point, speculative.

The second question revisits the ontological issue: How literally “real” are these experiences? A prospective answer must take into consideration various aspects of the experiences. Generally, the evidence indicates that more than simple fantasy, projection, or psychological expectancy is occurring in NDEs, deathbed visions, and past-life memories. As noted, many out-of-body NDE and past-life memory details have been confirmed as literally true descriptions of persons, objects, and events at the scene and even at other locations. For transcendent NDE and deathbed visions, the evidence seems to compel the attribution of reality in some objective sense to encounters with deceased loved ones.

Yet not all aspects of these transcendent experiences can be taken literally. As van Lommel (2010) and others have noted, factors such as the vocabulary, imagery, and beliefs deriving from individual, cultural, and religious contexts play a role in how participants describe or interpret their experiences. As noted, diverse travel-related imagery characterizes NDErs’ descriptions of their movement through a dark region (tunnel, tornado, valley, tailpipe, flower stem) and dying people’s descriptions of their anticipated travel (by airplane, bus, boat, horse, or even cow). Border-related imagery may pertain to nature (for example, thick fog, valley, or river); to human constructions (for example, wall, bridge, or gate); or simply—but perhaps with special ontological significance—to a remonstrance from a deceased loved one. Deathbed visions may be “embroidered with religious beliefs and symbolizations, whether it be Yamdoot, the Hindu messenger of death, or the Blessed Mother” (Osis & Haraldsson, 1977, p. 154). Whereas Western experiencers may be told caringly that they have work left to accomplish,

the manners of the Indian apparitions were sometimes more bureaucratic—the messengers of death (Yamdoot) might bring the patient before a desk where his record would be looked up by a man in a white beard. . . . It then turned out that the otherworldly messenger had brought up the wrong person. (p. 159)

Despite such cultural contextual “embroidery” (Indian bureaucracy, elderly male authority, etc., including the odd imputation that heaven could make a mistake), a core feature—in this case, a decision or instruction to return to the body—is typically discernible. Contextualization or embroidery is not tantamount to total fabrication. One must keep in mind that the comprehensive NDEr recollects a culturally contextualized narrative “in a continuous, unbroken sequence” (Sabom, 1982, p. 52) following verified material details.

Cultural context and other factors influence past-life memories as well. Incidental details such as the color of a house in a given year may be incorrect (the house may have actually been painted that color in a later year), yet the happenings recalled inside the house may nonetheless be essentially accurate. Generally, despite some imaginal fill-in (Tucker, 2005) or embroidery (“fantasy, elaboration, or distortions”), “the core of [the past-life recollection] will be a solid, accurate memory” (Weiss, 1992, p. 54; bracketed material added). Weiss suggested a number of criteria besides corroboration of details for distinguishing an accurate memory from a fantasy, for example, that the former contents “tend to be more vivid and visual,” that “the person is more emotionally involved and finds himself or herself in the scene,” that the scene “feels familiar” and “has a life of its own,” and that “the details of remembered scenes become more and more clear with repetition” (pp. 109–110).

With regard to NDEs, Morse (1992) also suggested that a core experience is discernible and accurate despite embroidery or “secondary embellishments”—such as one NDEr’s comment that she saw, among others in the light, the American music and film star Elvis Presley, with whom she had shaken hands as a child:

There is a core near-death experience (a sense of leaving one’s body, traveling up a tunnel, seeing people of light, etc.) which is shared by all ages and cultures. Along with those core experiences come secondary embellishments, descriptions of various details and figures that come from a person’s personal and cultural background. These are emotional archetypes incorporated into the experience by the beholder to help make sense of it.

So when the woman in the Midwest saw Elvis, she was probably projecting him onto the bright light that others have described as God or Buddha or have been unable to describe at all. Meeting Elvis as a child may have inspired the same awe and respect she felt when she met the light as an adult. . . . (pp. 119–120)

Hence, to describe or explain what happened, we “draw on our only resources: words and the world as we know it” (p. 127; cf. Callanan

& Kelley, 1992). The consequent embroidery or embellishments do introduce an important nuance to an understanding of experiencers' descriptions of a transcendent reality.

The ontological question arises especially in relation to frightening or distressing NDEs (see Bush, 2009; Greyson & Bush, 1992) and deathbed visions, especially in some cultures. Although van Lommel's and others' prospective longitudinal studies did not find cases of frightening NDEs, other studies have found a small proportion—such as 3.8% in Long's (2010) study, probably an underestimate given a likely underreporting bias. Some features of the classic NDE, such as the dark void, are frightening to some individuals, perhaps especially those “used to being in total control of all situations in their lives” (Rommer, 2000, p. 35). Van Lommel (2010) concurred with Bush (2009) “that people who have a frightening experience are not necessarily bad people” and can potentially benefit from the experience (van Lommel, 2010, p. 30). Some cases may be triggered by the stress of drugs or circumstances of the near-death crisis event. Weiss (2000)

regressed a policeman who had been injured in a car accident while on duty. He described a “terrible” NDE in which his body had been pushed and probed and pierced by malevolent beings. In truth, as the regression proved, he had partially awakened while being transported by ambulance to the hospital emergency room. During the trip, the paramedics were administering emergency medical treatment, inserting intravenous lines for fluid replacement, injecting necessary medications, monitoring blood pressure, creating an airway to assist his breathing, and so on. In actuality the “malevolent beings” were the emergency personnel who saved his life. (p. 156)

Frightening deathbed visions are also relatively rare, but less so in India, where the prominence of negative death mythology—in which, for example, Yamdoots, the messengers of death, are pictured in frightening fashion—may render such imagery more “alive in the Indian psyche” (Osis & Haraldsson, 1977, p. 90). One dying man, frightened by a vision of a Yamdoot coming for him, had a 103 degree Fahrenheit fever at the time; such a stressor could have triggered the negative cultural embellishment of his experience.

Although these and other questions remain, the convergent case for van Lommel's continuity claim stands. In terms of the NDE phenomenon, Long (2010; cf. Greyson et al., 2009) has argued that at least nine “lines of evidence,” most of which are cited in this article,

all converge on one central point: *There is life after death*. . . The convergence of several lines of evidence . . . builds a much stronger case than only a single line of evidence. . . . Suppose we had only two lines of NDE evidence. We may not be 100 percent convinced that these two lines of evidence prove an afterlife, but perhaps each line of evidence by itself is 90 percent convincing. Combined, these two lines of evidence by mathematical calculation are 99 percent convincing that the afterlife exists. (p. 4)

The convergence argument can also be made across the multiple methods—observation, survey, case study, structured interview, hypnotic regression, etc.—used in the investigation of NDEs and related phenomena. As I have noted, all of these methods have limitations or flaws of one sort or another—but different methods have different flaws. “Generally, the state of our methodology in the social and behavioral sciences is such that the exclusive reliance on any single method is fraught with peril” (Gibbs, Basinger, Grime, & Snarey, 2007, p. 249). Preferable, then, is a multimethod approach (Brewer & Hunter, 2006). In such an approach “the weakness of any one method can be, at least to some extent, compensated by the strength of another,” such that “conclusions based upon a convergence of evidence from different methods can be held with greater certainty than can conclusions based on one approach alone” (Miller, 2007, p. 113). Van Lommel’s continuity claim is accordingly bolstered insofar as it is consistent with convergent evidence from different methods.

Van Lommel (2010) has in effect appealed to convergence in supporting his claim. Although he attended only in passing to cognate phenomena such as those reviewed in this article, van Lommel (2010; cf. E. F. Kelly et al., 2007; Tucker, 2005) did devote considerable attention to the compatibility between NDEs—or, for that matter, enhanced intuitive sensitivity, remote viewing, genius insight, psychokinesis, teleportation, or cellular memory—and modern physics. Quantum mechanics and related areas of modern physics posit a “nonlocal” or holistic subatomic realm quite hospitable to the interconnected transcendent realm hinted at in near-death and related experiences of enhanced consciousness (Gibbs, 2010; E. F. Kelly et al., 2007). Van Lommel (2010) suggested a complementarity between enhanced or nonlocal and ordinary consciousness:

Enhanced consciousness is not limited to our brain because it is nonlocal, and under normal circumstances our brain only allows us to experience waking consciousness. Like the particle and wave aspects of light, this perspective on the relationship between nonlocal and wak-

ing consciousness constitutes a complementary theory rather than a dualistic one. (p. 267)

As noted, a crucial ontological theme common to NDEs and quantum physics is that of interconnectedness. “One of the most surprising discoveries of modern physics is that objects aren’t as separate as they seem. When you drill down to the core of even the most solid-looking material, separateness dissolves” (Radin, 2006, p. 1). Might “separateness dissolve,” then, “when you drill down” to the invisible subatomic foundation of “solid-looking” bodies and brains, that is to say, the living “material” called people? Does not separateness also seem to “dissolve” as people in NDEs seem to communicate telepathically and instantaneously, enter the consciousness of emotionally connected others in the life review, realize the far-reaching impact of their actions, and understand the importance of love (see Gibbs, 2010)?

The implications are enormous. “The realization that everything is nonlocally connected changes both scientific theories and our image of mankind and the world” (van Lommel, 2010, p. 347). Both NDE and quantum physics research can contribute to the construction of “science-based ethical theories” that emphasize each person’s “deep connectedness to the community of human beings, and to nature itself,” as physicist Henry P. Stapp (2006, pp. 619–620) has suggested. Similarly, David Fontana (2004) urged a movement beyond the prevailing Western materialist “philosophy of separation”—having more to do with Newtonian than with modern physics—and into a worldview that recognizes “the interconnectedness of all things” (p. 158). Such a theory, worldview, or “planetary type of consciousness” is “absolutely essential if humanity is to successfully solve the global crises that confront us” (Beauregard & Denyse, 2007, p. 295). Finally, Tucker (2005; cf. Tart, 2008) urged medical and scientific colleagues to consider the continuity evidence with an open mind: “A blanket statement that anything that conflicts with a materialist view of the universe must be false risks becoming considered one day as shortsighted as the past rejections by mainstream science of phenomena such as meteorites do now” (p. 197).

In sum, this review documents a convergence of support for van Lommel’s *Consciousness Beyond Life*. His continuity claim for human existence provides the most parsimonious explanation for challenging findings from studies of NDEs, deathbed visions, and past-life memories, not to mention a host of other currently anomalous phenomena. Although these phenomena are not commonly evident,

they occur frequently enough to resist dismissal as flukes. NDEs and deathbed visions pertain to the question of some realm of existence beyond that of our present earthly life; past-life (and prenatal) memories—reaching beyond not death but birth—may pertain to that same realm of existence. Collectively, these anomalous phenomena round out a picture of human existence that has been posited since Plato and Plotinus but now finds bases in modern science. Van Lommel may well be right that birth and death should be seen not as final limits but as transitions from one realm of consciousness to another.

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