

There is no death: Near-death experience evidence for survival after permanent bodily death

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1. Introduction

What is the human experience of dying? Among those who can tell us are those human beings who have been close to death and experienced the first stages of the dying process—those who have crossed the threshold of death and returned. Their experiences are called near-death experiences (NDEs).

In the early period of our research in 2005, we concluded that NDEs are an *archetypal* phenomenon that holds the key to understanding the existential questions of life and death—indeed to understanding the essential nature of the human being. Our conclusion is that NDEs provide the best evidence that the essential aspect of the human being—the Self—is independent of the physical body and survives the death of the body.

Most often, NDEs occur when one is near to death or in a state of extreme psychological or physical distress. What defines an NDE are the characteristic “elements” of the experience that are reported afterwards, for example:

- There is a profound sense of peace and freedom from pain.
- There is a feeling of separation from the body, generally floating above one’s physical body. This portion of the NDE is sometimes called the “*out-of-body experience*” (OBE) phase of the NDE.
- One may see events in the physical realm beyond normal physical sight that are later verified as accurate, called “*veridical perceptions*.”
- One may enter a beautiful heavenly realm or a dark velvety void, feeling it is one’s True Home. This portion is sometimes called the “*transcendental*” phase of the NDE.
- One may encounter deceased relatives or spiritual beings, including a “*Being of Light*.”
- One may have a review of the events of one’s life, a “*life review*,” or a *preview* of future events.
- One either chooses to return to earthly life or is told to return to the body.

Throughout an NDE, there is a continuous sense of one’s self, and afterwards, the near-death experiencer (NDEr) has a number of aftereffects, most prominently the loss of fear of death. The NDE is often felt to be the most significant event of their life—their life is changed forever.

Many of the aftereffects also indicate that there has been a change in the “energetic configuration” of the physical body. For example, many NDErs experience interference with watches and electronics; have increased sensitivities to bright lights, loud sounds, crowds, some medications, and some foods; and avoid watching television and movies, especially those containing violence. Over 90% of NDErs report they experienced a marked reduction or complete elimination of their fear of death and a dramatic increase in belief in an afterlife (44; 62).

Being close to death *by itself* does not constitute an NDE. Many people who come close to death—or actually die for a period of time, for example with cardiac arrest—do not remember experiencing anything. Only about 10–20% of cardiac arrest survivors recall experiencing an NDE.

Furthermore, many people who are *not* close to death *also* experience an NDE, for example during sleep, meditation, or fainting. These non-life-threatening NDEs are the *same* phenomenal experience with the same features, regardless of their precipitating cause—whether occurring in cardiac arrest or during meditation. This fact suggests there is a *common mechanism* for all NDEs (35).

1A. A consistent ‘core’ experience

NDEs have consistent, well-defined characteristic elements and qualities. The NDE Scale (17) assesses the number and intensity of the elements in an NDE to give a measure of the “depth” of the experience. The NDE Scale contains 16 items, each assigned a value of 0, 1, or 2 depending on the intensity of the element

addressed in the item. A total score thus ranges from 0 to 32. An NDE is defined as a score of 7 or greater. The average score for an NDE is about 16.

An independent statistical analysis of the NDE Scale was performed in 2004 that showed that NDEs are a structured experience (30). The Scale has been translated into more than 20 languages and used in hundreds of studies around the world. It measures *one consistent 'core' experience* that is the same for people of all ages and across many cultures (20).

NDEs are not merely isolated stories or anecdotes. There is a remarkable uniformity of the NDE elements across many countries and cultures (5; 60). Based on a Gallup poll and two research studies, between 4% and 8% of people have had an NDE (15; 27; 49). Given the uniformity of NDEs across many societies, a conservative estimate would be 5% of the world population have had an NDE. If that's the case, the elements and details of NDEs have occurred to nearly 400 million people worldwide—more than the entire population of the United States. So, hundreds of millions of people worldwide have had an NDE and have lost their fear of death.

1B. Can NDEs be studied scientifically?

The elements in NDEs are remarkably consistent. For example, about 35% of NDErs are told they must return to the body (33). Usually they hear the *same words*, to the effect “It’s not your time; you must go back; you have more to do on Earth.” Just as when many millions of tourists visit Paris and report seeing the same unusual structure which we then regard as an objective reality—the Eiffel Tower—so when many tens of millions of NDErs journey to another realm and hear the same unusual admonishment, with essentially the same wording “It’s not your time; you must return ... ,” their experience can be regarded as *objectively real*, not imagined.

Thus, the elements of an NDE may *appear* to be merely subjective experiences when taken *individually*. However, when an element is considered *collectively* across many millions of NDEs, the element can be regarded as the experience of a common, objective reality witnessed and shared by many NDErs. With this strong evidence from NDEr accounts, researchers are justified in accepting NDEs as providing valid data for scientific study, using the same rigorous empirical observations as in any other field of science.

1C. The quality of evidence from NDEs and related phenomena

In this paper, we consider successive aspects of NDEs and other death-related experiences. We examine the implications of these phenomena and their counterarguments. We draw conclusions, based on the evidence, to develop a coherent overall explanation supporting the proposition that human consciousness survives permanent bodily death.

The quality of the evidence we use is based on the following factors:

- ***NDErs are credible eyewitnesses to their experiences.*** For example, an NDEr reports observing an unusual event in another location while out-of-body which he later *corroborates* with a doctor. NDErs report their experience as hyperreal (43). The memory of their NDE does not change over time and is dependable (18).
- ***Millions of NDErs report the same experience with the same characteristics.*** For example, about 35% of NDErs report observing objects or events which could be corroborated and about half of them report that the facts were later corroborated (33). NDErs who observe and later corroborate an unusual event join perhaps 60 million other eyewitnesses worldwide who reported the same objective phenomenon—verified *veridical* perceptions from a position outside the physical body.
- ***Similar first-person testimony from multiple NDErs provides strong objective evidence.*** The weight of this evidence depends on the number of NDErs reporting the particular phenomenon.

- ***Independent corroboration from other credible witnesses of the phenomenon*** provides further objective evidence to the NDEr's testimony.
- ***Multiple lines of evidence from NDEs and other death-related experiences build a consistent, coherent picture*** of the overall phenomenon.

Thus, the collective weight of multiple lines of evidence, each supported by numerous cases—which in many instances have independent corroboration—can rise to the level of “beyond a reasonable doubt.”

Part 1: The essential aspect of the human being is independent of the physical body

2. Are the experiences in an NDE real?

How can we check that the experiences in an NDE are real? For one thing, we can check the parts of an NDE that relate to events in the *physical realm*. Do the NDEr's perceptions of physical events *during* the NDE match what actually happened, according to other witnesses? Yes, in many NDE cases, the NDEr's perceptions of physical events were verified as completely accurate. Typically, the NDEr's brain function at the time was severely compromised by deep anesthesia, coma, or cardiac arrest. In many of these cases, the NDEr's perceptions were impossible to perceive by ordinary means because the NDEr's vision was blocked or the events occurred at a distant location.

2A. *The case of Al Sullivan*

Dozens of such cases, verified by independent sources, are documented in *The Self Does Not Die* (55). Take the case of Al Sullivan:

Al Sullivan had emergency cardiac bypass surgery, during which his eyes were taped shut and he was anesthetized. A surgical drape over his head blocked any possible physical perception of the surgeon, Dr. Takata. During the surgery, Sullivan experienced floating above his body, looking down on the surgery. He noticed that Takata seemed to be “flapping” his arms as if to fly. Immediately after he had recovered, Sullivan told his cardiologist, Dr. LaSala, of this unusual behavior. Takata had the habit of placing his hands on his chest to avoid contaminating them and pointing with his elbows when he needed to direct his surgical assistants. Both LaSala and Takata could not explain how Sullivan could have known of this behavior, with Sullivan being under deep anesthesia, with his physical eyesight blocked, and Takata's behavior involving no sound or touch—perceivable only through a visual process (9; 55: Case 1.5; see also a video re-enactment, 45).

In this case, Sullivan accurately described seeing Dr. Takata's idiosyncratic movements while he was under total anesthesia, with his eyes taped shut and his head behind a surgical drape. Sullivan immediately told cardiologist LaSala about Takata's unusual movements whose response was, “Who told you that?” Sullivan responded that he *had seen it himself* from above his body in the operating room during his NDE. But Sullivan should not have been able to perceive the surgeon's movements. The doctors have no explanation for this. Takata said in an interview, “Frankly, I don't know how this case can be accounted for. But since this really happened, I have to accept it as a fact. I think we should always be humble to accept the fact” (55: 11).

A skeptic can object to the case of Al Sullivan because Sullivan was merely under anesthesia and there are cases of “anesthesia awareness” in which the patient is aware during surgery but cannot move or speak. In Sullivan's case, Takata's movements were unusual, *purely visual* events that could not be seen because Sullivan's eyes were taped shut and were behind a surgical drape blocking sight of the operating area. There was no way for Sullivan to perceive Takata's flapping arms, even if Sullivan were completely awake with his eyes open, because his vision would have been blocked by the surgical drape.

2B. *The case of Lloyd Rudy's patient*

Skeptics can also object because Sullivan wasn't close to death during the operation—his brain was still functioning, even though he was unconscious under anesthesia. They say there might be some currently unknown brain function that would support such perceptual abilities. However, there are dozens of cases of verified veridical perceptions during an NDE occurring *during cardiac arrest* when all brain function has ceased. Take the **case of Lloyd Rudy's patient**:

Cardiac surgeon Lloyd Rudy operated on a patient to replace a heart valve. After the surgery, Rudy could not get the patient off the heart-lung machine and restart his heart. After numerous failed attempts to wean him off the machine, the patient was declared dead. The life-sustaining machines were turned off, except for the heart echo-probe and other monitoring instruments. The patient had no heartbeat, no blood pressure, and no respiration for at least 20–25 minutes. During this time, Rudy and assistant surgeon Roberto Cattaneo stood in the OR doorway in their short-sleeve shirts discussing how they might have done the procedure differently. The patient’s heart spontaneously started beating again and developing blood pressure. Rudy called the surgical team back and they eventually resuscitated the patient who remained in a coma for two days in the ICU. The patient recovered with no neurological deficit and later reported having an NDE and floating above the scene in the OR. He recounted several accurate veridical perceptions during this time. In particular, he reported seeing the two surgeons standing and talking in the OR doorway in their shirt sleeves, with their arms folded, and seeing Post-It notes stuck together in a chain on a computer screen. The notes were telephone messages for the doctors that had been added after the surgery started.

Rudy commented, “He described the scene—things that there’s no way he could know. ... So what does that tell you? Was that his soul up there? ... It always makes me very emotional.” Cattaneo also commented, “The patient’s description of his experience is as Dr. Rudy described it word by word. People should interpret this according to their own beliefs, these are the facts.” In a later interview, Cattaneo remarked, “My role was that of assistant surgeon. I was in the case from beginning to end. I did witness the entire case and everything that my partner Dr. Rudy explained in the video. I do not have a rational scientific explanation to explain this phenomenon. I do know that this happened. This patient had close to 20 minutes or more of no life, no physiological life, no heartbeat, no blood pressure, no respiratory function whatsoever and then he came back to life and told us what you [hear] on the video. He recovered fully. ... This was not a hoax, no way, this was as real as it gets. ... One can believe what one wants to believe but this in my mind is a miracle unexplainable by current scientific knowledge” (55: Case 3.11; see also the video of Dr. Rudy’s interview, 11).

The evidence is clear that Rudy’s patient had died. There was no heartbeat, no blood pressure, and no respiratory function for 20–25 minutes, as indicated by the monitors which had been left on. The doctors pronounced the patient dead and told his wife that he had died. The patient’s chest was closed up briefly and prepped for postmortem exam.

When the heart stops, there is no blood flow to the brain. The brain electrical activity and brain function that are dependent on this blood flow cease after 10–20 seconds (34: 9–10). Yet Lloyd Rudy’s patient experienced a vivid NDE while his heart had completely stopped. Although his eyes were taped shut, he later reported perceiving veridical details of the doctors and the OR that were later verified by the two surgeons. The unusual purely visual events the patient perceived included the two doctors standing in the OR doorway in their shirt sleeves and the Post-It notes stuck to the computer screen. These perceptions occurred from a vantage point near the ceiling during the time there was no brain electrical activity.

How could a patient with no brain function have accurate perceptions from a location outside the physical body? This case and many others similar to it (55) suggest that the perceptual, cognitive and memory aspects of the mind can operate outside the body, independent of brain function.

2C. The case of Laurin Bellg’s patient Howard

A skeptic can object that Dr. Rudy’s patient was in the same room as the two surgeons and may have had some perceptions from residual brain function, even after 20 minutes. However, there are numerous cases in

which the NDEr perceives unusual objects and events at a distance from the physical body—in an adjacent room, down the hallway, on another floor of the building, or hundreds of miles away. Take the following case:

Critical care physician **Laurin Bellg's patient Howard** suffered a cardiac arrest while recovering from surgery in the ICU. Bellg was the physician in charge during the resuscitation. Howard was completely unconscious but was resuscitated by several defibrillation shocks and was put on a ventilator.

Howard related that he shot out of the top of his head, "I'm looking down on my body and it feels like I'm bobbing and bouncing against the ceiling." With the thought that maybe he was to go somewhere, "I felt myself rising up through the ceiling and it was like I was going through the structure of the building. I could feel the different densities of passing through insulation. I saw wiring, some pipes and then I was in this other room. It looked like a hospital but ... it was very quiet ... like there was no one there. There were [people in beds that] looked like mannequins and they had IVs hooked up to them but they didn't look real. In the center was an open area that looked like a collection of workstations with computers."

Right above his ICU room is a nurse-training center with simulated hospital rooms, with medical mannequins on some of the beds, and in the center, a collection of workspaces with computers. Dr. Bellg and the attending nurse were astonished at the accuracy of Howard's description and because the presence of the nurse-training center was not generally known, even by non-nursing staff.

Howard continued, "I wasn't there long before I got jerked back to my body with a jolt and then floated up again. As I floated up this time, I heard someone say, 'Turn up the juice' and then 'Okay, charge.' ... Then I saw the things they put on your chest to shock you like you see on TV, and I saw my body jump right after someone said, "Everybody clear." These perceptions were all completely accurate. Howard was jerked back on the *first* defibrillation shock. As Bellg recounted, the first shock had not worked and "right away I said, 'Let's turn up the juice. ... Okay, charge.'"

Howard's heart was finally brought back in normal rhythm. He was intubated and remained under sedation for several days after the resuscitation. When he was finally weaned off the ventilator, he was able to talk and related a number of additional veridical details of the resuscitation, for example, Bellg's specific comments when putting the intubation tube in (6: 33–43; 55: Case 3.33).

Howard's numerous veridical visual and auditory perceptions occurred during cardiac arrest and resuscitation while his heart was still stopped. They were verified immediately after his ventilator was removed, in his first telling, including accurate details of unusual objects—in the training center on the floor above the ICU—which were clearly out of his physical line of sight. Notably, Howard reports feeling "the different densities of passing through insulation." NDErs frequently report easily floating above their physical body, bobbing against the ceiling, and easily moving through solid objects such as walls and ceilings, sometimes feeling a slight resistance or a change in density in the process (34: 21, 33).

2D. What do these cases mean?

The evidence from these three cases—and many additional cases of veridical NDEr perceptions—support the idea that some part of the human being—the mind or spirit—has actually separated from the physical body and has perceived events in the physical realm from a vantage point outside the body while the brain was fully anesthetized or was completely inactive. The perceptions occur in real time and are completely accurate. In these cases, no physical explanations hold up to scrutiny (Section 8B).

The experiences in the NDE—the perceptions of the physical realm—are *real*—for the following reasons:

- The perceptions of the physical realm are *veridical*, that is, they are accurate and have been verified by a credible third party (55).

- The veridical perceptions occur from the NDEr's reported *vantage point outside* the physical body, generally from above, near or bobbing against the ceiling. The NDEr can be distant from the NDEr's body: down the hall, on a different floor, or many miles away:

During emergency open heart surgery while out of town some 1,250 miles from his home, **Tony Meo's** heart stopped for 30 minutes. During his OBE NDE, he thought about his wife and found himself in the surgical waiting room and saw her on the phone crying. Then "he thought he 'just wanted to go home to Florida' and suddenly he was there! While home in Florida he 'saw' all of the mail which had been taken in by the housesitter, strewn all over the dining room table." He saw a Danish office supply catalog lying there. In the transcendental part of his NDE, Tony had a life review and was asked if he wanted to go back. Tony said yes because his wife, Pat, and his family needed him. After he had recovered, Tony and Pat returned home. They found that Tony had "accurately described all of the letters, bills, junk mail, and magazines," including the Danish catalog, which they had never written away for (55: Case 2.12; 56: 5–7).

- The objects or events accurately perceived are *unusual or idiosyncratic*—Al Sullivan's doctor flapping his arms; Lloyd Rudy's patient seeing the two surgeons in their short sleeves in the OR doorway and the chain of Post It notes; Howard examining the nurse-training center. The NDEr's description is frequently of a detailed, *purely visual event* or an unusual *object*. The events or objects are unfamiliar to the NDEr and are unlikely to be guessed or inferred from the circumstances.
- These *purely visual* perceptions *could not have occurred by physical sight*—they were beyond the reach of physical senses, either because physical sight was blocked (Al Sullivan's and Rudy's patient's eyes were taped shut; and Howard's training center was on the floor above), or the unusual events occurred while brain function had stopped (Rudy's patient and Howard were both in cardiac arrest).
- Often the veridical perceptions are *immediately disclosed* by the NDEr, such that they could not have been told to the NDEr by someone else or a memory that the NDEr subconsciously fabricated from information acquired later.
- The *timing of specific idiosyncratic events* reported by the NDEr can establish what the NDEr's level of brain function was. In some cases, it is clear—beyond reasonable doubt—that the perceptions *could not have been produced by the brain*, yet the NDEr correctly identified the sequence and details of the unfolding event. For example, several NDErs have been able accurately to describe the *start* of their resuscitation procedure after cardiac arrest; Lloyd Rudy's patient accurately described the two doctors standing in the OR doorway after he had been declared dead for at least 20 minutes and before his resuscitation had started.

Because the NDEr's perceptions are verified as accurate, the NDEr's *experiences* in the physical realm are *real*. The fact that the NDEr's perceptual viewpoint—the line of sight—is reported outside the physical body strongly suggests that the NDEr's mind or consciousness has somehow *separated* from the body during the NDE and is in a different location. The fact that NDErs have accurate perceptions *without* the mediation of the brain suggests that the mind operates independent of the body.

3. What demonstrates that the mind is a *separate entity* independent of the physical body?

Numerous aspects of an NDE show *how the mind functions* independent of the physical body.

3A. During an NDE, the mind functions as a *cohesive unit*

The mind appears to be a *cohesive unit* during an NDE. NDErs' reports indicate that *all* of their normal cognitive faculties are active during the NDE. NDEr perceptions include all normal *sense faculties*: sight,

hearing, and less frequently, touch, smell, and taste. Perceptions of physical objects and events are accurate. NDErs are fully *self-aware* and retain all of their prior knowledge. Their *thoughts* are clear and reasoned (e.g., Howard wondered whether maybe he should “go somewhere” [Section 2C]). NDErs exhibit the normal range of *feelings* (e.g., peace, love, joy, wonder, bewilderment, fear, frustration, irritation). Their *intentions* are immediately fulfilled (e.g., Tony Meo “just wanted to go home” and suddenly he was back in Florida [Section 2D]). During their NDE, NDErs nearly always recall *existing memories* of prior life events; and during their NDE, new vivid memories of *their NDE* are formed. The NDEr’s *self* separates and reunites with the physical body *as a unit*.

The NDEr experiences that their *entire being* has separated from the physical body and that *all aspects* of their mind or self are still consciously present to them *throughout* their NDE—their senses, thoughts, feelings, intentions, and memories.

3B. The continuity of consciousness through separation and return

The NDEr’s self-conscious awareness remains intact while out-of-body. NDErs feel themselves to be the same persons throughout the experience. The continuity of self-conscious awareness is demonstrated in cases in which the NDEr shifts from out-of-body to in-body repeatedly, like a yo-yo. Here are two cases:

3B-1. The case of Joe McMoneagle

NDEr Joe McMoneagle reported that during his NDE from convulsions, he was out of his body observing his friend trying to revive him. Finding no pulse, his friend struck him in the chest periodically—*not* as in CPR, which was not widely practiced at the time, in 1970.

“Not finding [a pulse, my friend] began to violently strike me in the chest, cursing me to breathe with each punch. The interesting thing I experienced through all of this was that every time he struck me in the center of the chest, I would feel a *click* and find myself looking up through my physical eyes into his. This would immediately be followed by another distinct *click*, and once more I would be out of my body and looking down at him from above. After 10 minutes of this, I was beginning to feel like a yo-yo. *Click—pain, click—no pain, click—pain, click—no pain, click ...* and so forth and so on. As he continued striking me in the chest, I began screaming at him with my mind while in the out-of-body state to *stop this nonsense, can’t you see I’m dead, leave me alone!* Until eventually he did stop and I remained outside of my body” (39: 30–31).

3B-2. The case of Mary Neal

Orthopedist Mary Neal drowned in a river during a kayaking trip. Her body was severely injured as the force of the water ripped her out of the kayak. Her kayaking friends retrieved her body—after 30 minutes under water—and started CPR. In her NDE, she rose out of her body and was greeted by deceased relatives and other spiritual companions. As she proceeded on a path to heaven, she could look down on her kayaking friends trying to resuscitate her body on the riverbank.

“My body looked like the shell of a comfortable old friend, and I felt warm compassion and gratitude for its use. ... I heard [my friends] call to me and beg me to take a breath. I loved them and did not want them to be sad, so I asked my heavenly companions to wait while I returned to my body, lay down, and took a breath. Thinking that this would be satisfactory, I then left my body and resumed my journey home.” [Her kayaking friends kept beckoning to her to come back and take a breath.] “Each time ... I felt compelled to return to my body and take another breath before returning on my journey. This became tiresome and I grew quite irritated with their repeated calling. ... Before we could go inside [the hall, my spiritual companions] ... turned to me and explained that it was not my time to enter the hall; I had not completed my journey on earth, had more work to do, and must return to my body. ... [T]hey returned me to the river

bank. I sat down in my body and gave these heavenly beings, these people who had come to guide, protect, and cheer for me, one last, longing glance before I lay down and was reunited with my body. I became aware of my body and opened my eyes to see the faces of [my friends] looking down at me” (46: 72–75).

3B-3. The continuity of consciousness in repeated separation and return

It is important to note that the transitions in and out of the body were triggered by *repeated external events*. Joe McMoneagle was repeatedly catapulted back to his body each time his friend violently struck him in the center of his chest. Mary Neal was drawn back to her body by the compassion she felt for her friends when they repeatedly pleaded with her to take a breath.

We can infer that the momentary resumption of the heartbeat can compel the NDEr back to their body. Joe McMoneagle briefly reunited with his body when he was struck in the chest. Laurin Bellg’s patient Howard (Section 2C) “got jerked back to [his] body with a jolt” on the first defibrillation shock and then floated up again. Other NDErs appear to be drawn to return to the body out of the ties of love and compassion for others—Mary Neal for her kayaking friends and Tony Meo (Section 2D) for his wife and his family.

Throughout these cases, the NDEr experiences a continuity of consciousness, but their perspective changes from out-of-body to in-body. The body momentarily starts to function again: Joe was briefly looking up through his physical eyes and Mary was able to lay down in her body, take a breath, and then resume her heavenly journey.

Throughout the NDEr’s experience of the separation of their mind from the body and its return to the body, the mind holds a continuity of *wakeful self-awareness*. The unity of the mind is demonstrated most clearly in these cases of *repeated* transitions in and out of the body. Because there is a seamless transition of consciousness in leaving the body and then returning, it is evident that mediation by the brain does not alter the identity or unity of the mind.

3C. The contrast of the out-of-body mind to the mind in ordinary consciousness

There is a stark contrast between one’s experience of the “out-of-body mind” in an NDE and the “in-body mind” in ordinary consciousness (34: 28–31).

3C-1. Loss of physical pain and disabilities

In the out-of-body state, NDErs feel *no bodily pain*, even when painful medical procedures are being performed on their physical body. Prior *physical defects or disabilities* such as blindness, deafness, lameness, or missing limbs are absent in most NDErs (Section 4C-1). NDErs who are blind or visually impaired, including those blind from birth, reported being able to see while out-of-body during their NDEs, and in some cases their perceptions were independently corroborated (53: 97–120).

So in the NDEr’s experience, the mind appears to operate as if it has been freed from the normal constraints of the physical body, with loss of pain and disabilities, feelings of weightlessness, sharpness of perceptions, clarity of thought, and instantaneous response to volition, as with NDEr Tony Meo (Section 2D) traveling 1,250 miles back to this home.

3C-2. Enhanced perceptions and memory, a heightened sense of reality

When out-of-body, NDErs also experience *enhanced visual perceptions, enhanced memory formation, and a heightened sense of reality*:

- During the out-of-body state, vision appears to be a *special form of perception*. NDErs report a kind of “wraparound” vision involving *simultaneous 360°* vision on all sides of an object, *through* it, and *within*

it, or “vision from everywhere.” NDE researcher **Jean-Pierre Jourdan** cited the account of French NDEr J.M.:

“I was surprised that I could see at a 360° angle: I could see in front and behind me, I could see underneath, I could see far away, I could see up close and also transparently. I remember seeing a stick of lipstick in one of the nurses’ pockets. If I wanted to see inside the lamp which illuminated the room, I’d manage to do so, and all of this instantly, as soon as I wanted to. ... I could see, *all at once*, a green plaque with white letters saying, ‘Manufacture de Saint Etienne [a city in France].’ *The plaque was under the edge of the operating table, covered up by the drape I was lying on. I could see with multiple axes of vision, from many places at once. This is the reason why I saw this plaque under the operating table, from a completely different angle, since I was up there by the ceiling and I still managed to see this plaque located under the table, itself covered by a sheet. When I wanted to check this, the surgeon and I realized the plaque was actually there and read ‘Manufacture d’armes de Saint Etienne’*” (25: 83).

Jourdan proposed that the unusual qualities of visual perception in NDEs suggest that the NDEr perceives the physical world “from a point located in an additional dimension—and therefore *external to normal human space-time*. ... [A] distinctive five-dimensional *spatiotemporal* perspective seems to be the case in NDEs” (25: 86).

- NDErs’ *memory of the events of their NDEs* are very vivid and are indelible upon returning to the body. Their accounts don’t fade and are not embellished over time, even after decades (18). Three separate studies of NDEr memories (43; 47; 63) showed that NDErs remember being actively involved in the events and actually perceiving the phenomena. When recalling their NDE, the NDEr “relives” the experience. The memories formed of the NDE are more vivid—more real—than memories of real events.
- Finally, the general consensus among NDErs is that their experiences while out-of-body are *much more real than experiences of ordinary reality*:

“A man who rolled his car over at the age of 21 said, ‘I have no doubt that this experience was real. It was vastly more real than anything we experience here.’ A woman who attempted suicide at the age of 31 said, ‘This was more real than anything on Earth. By comparison, my life in my body had been a dream.’ And a woman who, at the age of 25, bled out during a surgical procedure when the surgeon accidentally cut an artery, noted: ‘What happens during an NDE happens in the realm of truth, in the true reality, and what happens here on Earth is just a dream’” (43: 121–122).

These enhanced capabilities evidently occur when the NDEr’s out-of-body mind is not constrained by brain function. The enhanced vision—seeing accurately from all directions at once and seeing *through* objects—is certainly not possible with physical vision. In the referenced studies, the characteristics of the memories formed in NDEs were found to be amplified compared to memories formed in ordinary consciousness of real events, which suggests that the NDE memory *formation* was not tied to brain function.

3C-3. An adult mind in a child’s body

A surprising number of people who had their NDEs during infancy or early childhood report that they were “adults” during their NDEs (34: 19). Most people reporting an NDE or NDE-like experience from this early age describe the experience from an adult perspective, similar to having an adult mind in a child’s body. For example, NDE investigator P.M.H. Atwater quotes from the **case of Vicky**:

“I remember being able to leave my body, fly around the room, and being pulled back into my body. ... [My dad would] tickle me under my chin. It made me laugh so hard I would fly up through the top of my head and out of my body. From the ceiling I’d look back at my little body on the couch. ... I could see my mom in the kitchen ironing something on the ironing board. I could see the whole house while soaring around. ... While I was out I wanted to stay out, but something always pulled me back. It was as if there were two parts of me. One aspect was me as the baby. And the other aspect was me with an adult mind. While I was out of my body I was me—but older, wiser, much more knowledgeable. When I returned to my baby body, it was as if I forgot that other aspect of myself” (4: 35–36).

NDE-like experiences such as Vicky’s can occur even when the person is not near death but score on the NDE Scale as valid NDEs. In Vicky’s case, she described being out-of-body, having perceptions out of the line of physical sight, and being forced to return to her body. Most significantly, she described her out-of-body mind as being a fully mature, adult mind that was an older, wiser, and more knowledgeable version of herself. These qualities were lost when returning to her body. Vicky’s in-and-out experience is reminiscent of Joe McMoneagle’s yo-yo-like experience.

3C-4. That physical body wasn’t me!

When NDErs report seeing *their own physical body*, they view it differently: Their body is not part of who they are. They typically view their body with disinterest, disdain, or even disgust. Their physical body generally appears as an empty shell, like an old, discarded coat. For Mary Neal, her body “looked like the shell of a comfortable old friend” (Section 3B-2).

And when NDErs experience their *return to the physical body*, the contrast between their expanded out-of-body mind and the coarse physical body becomes even more obvious. Their expanded mind needs to be squeezed back into the body. Consider NDEr **Erica McKenzie’s** experience as her out-of-body mind rejoined her physical body:

“It was my body but I also knew the real me was not attached to that body. I honestly didn’t think I could shove myself back into what had once felt so familiar, but now I identified as foreign. I knew reintegrating was going to be overwhelming and painful. That body wasn’t me! ... It was too confining and claustrophobic to even consider trying to stuff myself inside it. There must be another solution, but I couldn’t think of one. ... In a split second, I was shoved back into my limp body like a hand in a glove, only the glove was too small. Each part of my spiritual body squeezed its way into my physical counterpart. I could feel my spiritual big toe fit back into the spot of my physical big toe along with each one of my fingers, my hands, feet, arms and legs. My body felt heavy and confined as if I’d been zipped inside a jacket two sizes too small. All the feelings attached to my sick and exhausted body assaulted my spiritual one. My chest hurt along with the rest of me. This was an enormous let down from the light-filled vastness of Spirit I had just experienced. It wasn’t me at all! I had lived as a multidimensional being, basking in the love of God’s presence only to be forced back into the stark reality of a 3-dimensional body. How could I possibly go back to that?” (38: 98–100).

When NDErs experience being reunited with the physical body, pain returns. *Each time* Joe McMoneagle was reunited with his body, he felt tremendous pain, but he felt no pain while out-of-body (Section 3B-1). Any prior physical disabilities also return.

On return to the body, the NDEr typically feels heaviness, fatigue, and physical sluggishness. Compared to experiences during an NDE, the physical body evidently dampens and dulls thinking and perceptions and constrains movement. Erica McKenzie’s body felt heavy and confined, and her pain returned when her

“spiritual body” was shoved back into and reintegrated with her “3-dimensional body.” So the NDEr experiences their consciousness—their mind—coming back to the limitations of their physical body.

3D. *The mind as the essence of the person*

During an NDE, the NDEr’s sense of “self” derives from various aspects of the experience:

1. They know they exist with all of their cognitive faculties, without the physical body.
2. They know they are the *same person* who lives in or out of the physical body.
3. They know they are the agent of their actions, feelings, and thoughts. They can choose and their intentions are immediately fulfilled.

NDErs experience that their *entire being* separates from the physical body and then returns to the body. During their experience, they view their physical body as *separate from themselves*—like an empty shell, and yet their *identity*—their *mind* or *self-awareness*—continues *intact* before, during, and after the NDE. Thus, NDErs experience their mind as the *essence* of their being, *independent* of the physical body. “That physical body wasn’t me at all!”

3E. *Summarizing the evidence that the mind is a separate entity*

- NDErs experience that their *entire being* separates from the physical body. All aspects of their mind act as a *cohesive unit* and are consciously present to them throughout their NDE—their senses, thoughts, feelings, intentions, and memories.
- Throughout the NDEr’s separation of their mind from the body and its return to the body, their mind is continuously *self-aware*. This continuity of the mind is particularly clear in cases of *repeated* transitions in and out of the body.
- The stark contrast between the “out-of-body mind” in an NDE and the “in-body mind” includes a sense of freedom from physical constraints, the loss of physical pain and disabilities, feelings of weightlessness, sharpness of perceptions, clarity of thought, and instantaneous response to volition. There are enhanced capabilities of perception and memory formation and the view that their physical body is not their real self. During some infant and early childhood NDEs, NDErs later report their out-of-body experience was from an adult perspective. The contrast with the out-of-body mind becomes clearer with the return to the body: the NDEr feels squeezed painfully back into the physical body, with the return of heaviness, fatigue, pain, and disabilities, as well as dulled thinking, perception, and volition.
- NDErs experience their mind as the *essence* of their being, independent of the physical body. They are the *same person* when out-of-body as within their physical body.

Thus, the experiences of NDErs strongly suggest that a person’s mind is a *separate entity* that is independent of the physical body.

Still skeptics can object that all of this evidence is from the NDErs’ *subjective* experiences. We can’t see the NDEr’s out-of-body mind and the mind appears to be nonmaterial—it easily passes through solid objects, like ceilings and walls. So is the subjective experience of the nonmaterial mind *objectively* real? Is there *objective evidence* of the existence of the nonmaterial mind entity?

4. Is the mind entity *objectively* real?

We can take a subjective phenomenon to be *objectively real* if it can be observed by others. There are several lines of evidence from NDEs that the nonmaterial mind is objectively real.

4A. The NDEr can be seen by animals

The NDEr's out-of-body "body" can evidently be seen by animals. **Jerry Casebolt** experienced an NDE at age seven. He died during surgery, left his body, and was met by a "Light Being." Toward the end of his NDE, he floated over a school playground located just north of the hospital. There were lots of children playing outside there. Jerry recounts his NDE in the third person, as a boy named Gary Caldwell:

"A German Shepherd dog was playing with the children. Gary [i.e., Jerry] floated down to investigate. The dog sensed his presence and playfully barked at him. ... Gary floated down and positioned himself just a few inches above where the dog could jump. He teased the animal by staying just out of reach. The dog barked and jumped up at Gary. As the dog became more excited, the children took notice. One small girl began to cry. ... The dog continued to wag his tail excitedly, barking and jumping crazily up at Gary. Gary laughed. He was having a good time like any seven-year-old kid should. The Light Being did not share in the humor of the moment. It stopped this 'childish' diversion and hauled Gary back to the top of the hospital roof as it transmitted, 'You are causing the other children to be frightened'" (10: 81).

In a personal communication, Jerry told us that he and the dog "looked into each other's eyes; I was moving up, down and to the sides; we moved together like a dance."

4B. The NDEr can be seen by other people

An "apparitional" NDE is a particular event in an NDE in which the out-of-body NDEr visits and communicates in some way with a living person, and *both* accounts of the encounter are subsequently verified to be *consistent* with one another.

4B-1. The case of Olga Gearhardt

In 1989, Olga Gearhardt underwent heart transplant surgery. All of her family came to the hospital to await the outcome, except her son-in-law who could not be at the hospital. The heart transplant was successful, but at 2:15 a.m., her new heart stopped beating, and it took 4 hours to resuscitate her heart and then longer still for her to recover consciousness. The son-in-law, who was sleeping at home, awoke at exactly 2:15 a.m., and Olga was standing at his bedside. Thinking that the surgery had been postponed, he asked her how she was. She replied, "I am fine. I'm going to be all right. There's nothing for any of you to worry about." She asked him to tell her daughter (his wife) and then she disappeared. The son-in-law wrote down the time and exactly what was said, and he went back to sleep. When Olga regained consciousness, her first words were, "Did you get the message?" Olga later reported that she had left her body and had tried but was unable to communicate with the family members who were all asleep in the hospital waiting room, so she went to the son-in-law, with whom she succeeded in communicating. NDE researchers Melvin Morse and Paul Perry thoroughly verified these details, including the note the son-in-law had scribbled (55: Case 7.3).

In apparitional NDEs, the in-body person typically perceives the NDEr as physically present. Olga's son-in-law thought that Olga was physically present in his bedroom; he assumed the surgery had been postponed.

4B-2. Laurin Bellg's patient dying of cancer

Critical care physician Laurin Bellg related the encounter of a woman dying of cancer with her estranged son during her NDE.

A woman was dying of cancer in the hospital but refused to have her son visit her. Her son had been estranged from his family for 25 years. He had done some things that had hurt his parents financially and had served prison time for the theft that had destroyed their financial lives. The son wanted to come visit

his mother on her deathbed and she said, “No. I don’t want to see you.” The son is sitting in a bar near the hospital, experiencing deep sorrow, deep regret, deep remorse, wanting to connect with his mom before she crosses over. He’s crying. “He looks up and he sees his mother coming into the bar, and he’s so shocked and so elated. He’s excited, and he can’t understand it because she’s so sick. What is she doing there? And he gets up to go greet her. ... [But] there are people that obscure the view, and when they pass, she’s no longer there. His mother wakes up and says [to her daughter], ‘I had the strangest dream. I dreamed that I was in a bar and I saw my son sitting at a table crying, and he got up to start coming to me. And I got scared and I woke up.’”

Laurin Bellg explained, “I was there the next day to hear it. What we *do* know is that the afternoon that it happened, the lady woke up and told her daughter and then the son that evening told his sister. She’s the one who was able to put together that this had happened around the same time. She’s told me because she was just so amazed that had happened. ... The thing that’s so mysterious to me is for her to explain that she started walking toward her son, saw him crying, he got up and for him to say he saw his mom, got up, and started to go to her. That’s pretty astonishing.”

Again, the son thought his mother was actually there in the bar. Bellg continued, “It looked like she was physically there. It never occurred to him that this would be an apparition or a projection of some kind” (55: Case 7.5).

4C. The NDEr can be seen by other NDErs

In cases of *multiple simultaneous NDEs*, two or more people have an NDE at the same time. The NDErs see each other out-of-body and can converse with one another.

4C-1. The case of the Hotshot firefighters

One case of multiple NDEs happened to an elite 20-person fire-fighting group called Hotshot who were battling a wilderness fire on a steep slope at the top of a mountain in 1989. The group was caught by shifting winds, and they were quickly engulfed in an inferno of flames.

“One by one the men and women fell to the earth suffocating from lack of oxygen. They were reduced to crawling on their hands and knees while they attempted to get back up the hill to a safer area. ... Jake [(John Hernandez), the crew boss,] found himself looking down on his body which was lying in a trench. ... Jake felt completely at peace. As he looked around Jake saw other fire-fighters standing above their bodies in the air. One of Jake’s crew members had a defective foot which he had been born with. As he came out of his body Jake looked at him and said: ‘Look, Jose, your foot is straight.’ ... All of the crew escaped and the only visual evidence on them of what they had been through was a few singed hairs. Jake said that in comparing accounts of their different episodes the men and women were astonished that they had each undergone some type of near-death experience” (16: 128–131).

4C-2. The case of May Eulitt and her two friends

Another case of multiple simultaneous NDEs is described by May Eulitt from Oklahoma. In the late afternoon, May and her two close friends, James and Rashad, were chopping corn stalks for fodder. A rainstorm started, and the three hurried to finish the last wagon load. When they reached the metal gate, James opened the gate, and May leaned over from the wagon to pull him up but slipped. In the wagon, Rashad grabbed May’s other arm just as a bolt of lightning struck the gate.

“[I]t exploded around us with a such an incredible brightness that it felt as if we were being sucked directly into the sun. The next thing we knew, all of that was gone, and we were all in a large room or hall made of

dark stone. ... I just felt peaceful, floating along there in the gloom with my two friends in the great, dark hall. The stately walls of this place loomed above us ... I remember thinking that it would have suited King Arthur. It was at that point that I realized that the three of us were united in thought and body. We were holding hands just as we had been when the lightning struck, but our minds were connected as well. Images of Arthur came to me from James and Rashad and I could see the same images that they were seeing” (12: 108).

In both of these cases of simultaneous NDEs, the NDErs could see and interact with one another. During the NDE, Jake saw Jose’s foot and remarked to him that his defective foot was now straight. May, James, and Rashad saw each other and could experience what each of the others was experiencing. Each NDEr’s out-of-body “body” was objectively visible to the other NDErs.

4D. What do these cases mean?

The NDEr’s nonmaterial “body” was *seen by another person or animal*—by Olga Gearhardt’s son-in-law and by the dying woman’s estranged son. The German shepherd saw and barked at Jerry Casebolt as he playfully taunted him. The 20-person Hotshot team saw each other during their simultaneous NDEs. May Eulitt and her two friends saw and communicated with each other during their experiences together in another realm.

In each of these cases, the NDEr’s out-of-body mind was objectively present to others. In the apparitional NDEs, the NDEr appeared to the other person with a normal physical body.

The NDErs’ vivid *subjective* experiences while out-of-body coupled with the corresponding *objective corroboration* of their out-of-body “body” by others demonstrate that the *NDEr mind entity is a real thing, a real being. The separate mind entity really exists.*

5. The mind entity hypothesis

Given the foregoing evidence, we propose that the human being consists of a nonmaterial “mind” that is spatially coextensive and intimately integrated with the physical body. The mind is the *essence* of the person. It is an objective, autonomous *entity*. “Nonmaterial” here means not consisting of material particles or atoms (34; 35; 37). J. Kenneth Arnette’s *theory of essence* (1; 2; 3) is an earlier exposition of this idea.

The mind entity is the seat of consciousness of the person, the subject in which phenomenal experience occurs. All cognitive faculties—perception, thinking, feelings, volition, memory, and self-awareness—reside in the nonmaterial mind, not in the brain.

In ordinary in-body consciousness, the mind entity interacts energetically with the brain’s electrical activity to establish consciousness and support the mind’s cognitive faculties. Ordinarily, the mind is completely dependent on the brain’s electrical activity for consciousness. However, in an NDE, the person’s mind entity can separate from the brain and operate independent of the brain and body.

There are thus two states of consciousness: an “in-body” state, whereby the mind entity is dependent on brain activity for normal cognitive functions, and an “out-of-body” state whereby the mind entity is separated. In the separated state, there is no brain interaction; thus, visual, auditory, and other sensations occur directly in the mind without the physical sensory apparatus of the body and brain. When returning to and reuniting with the body, the NDEr’s mind entity returns to ordinary in-body consciousness.

6. How does the nonmaterial mind entity relate to the physical body?

If the mind entity, the essence of the person, is objectively real, how does it work in the physical body in ordinary in-body consciousness?

6A. *Dependence on brain activity for conscious awareness*

When united with the body, the mind entity has a strong *dependence* on brain activity for awareness. We can see this connection when the brain is impaired: When a person is hit on the head or takes certain drugs or alcohol, the person's consciousness is also impaired. When the brain activity stops, the person becomes unconscious. A person's brain activity, measured by various imaging techniques, is *closely paired with* their subjective experience, so the brain's neural activations are *necessary* for ordinary in-body consciousness.

If the mind entity is united with the body in ordinary consciousness, there must be some way that the mind works with the brain to be aware. There must be some form of *interaction* between the mind and the brain. So how does the *mind* work with the *brain* to achieve consciousness? Is there some plausible *mechanism*?

6B. *How could a nonmaterial mind interact with the material brain?*

Skeptical philosophers invariably ask how something that is *nonmaterial* could possibly interact with physical matter. Surely there must be some sort of "push-pull" *mechanism* in which the nonmaterial mind exerts a *force* on physical matter—and vice versa, physical matter exerts a force on the mind. How could a nonmaterial mind entity *causally interact* with the physical brain?

6B-1. **Out-of-body interactions with physical processes**

In fact, there is substantial evidence of the interaction of the out-of-body mind with physical processes. These subtle interactions give rise to subjective phenomenal sensations with veridical perceptions. There are numerous forms of interaction between the mind and physical energies, such as light, sound vibrations, solid surfaces, and solid objects.

The NDEr's "sight" interacts with *light* to provide veridical visual perceptions with normal colors. The NDEr's "hearing" interacts with *sound vibrations* from heart monitors, fluorescent lights, and human speech to provide veridical auditory perceptions. Many NDErs report that they "bob" against the surface of the ceiling (34: 21, 33).

6B-2. **A new physical force involved in mind to matter interactions**

Some NDErs report feeling a change in density or slight resistance when moving through solid objects, such as walls and ceilings. As we described earlier, Lauren Bellg's patient Howard (Section 2C) reported that as he floated up through the ceiling of his ICU room and into the room above, he felt the different densities of passing through insulation.

In another case, a **10-year-old NDEr** reported an experience during sleep. (We assume this NDEr is a woman.) Even though she was not near death, her experience included many of the elements of an NDE: being out-of-body, being surrounded by a bright light, having feelings of peace, calmness, and love. But most important for our considerations here, she reported:

"I remember feeling a bit confused and decided to go upstairs to talk to my parents, but when I got to the door, I realized I couldn't reach for the doorknob. It frightened me and the desperation to try and get their help grew, so I [began] to force myself through the door. It felt as if I was pressing through a cotton ball. Some resistance" (23).

Finally, in a personal communication in 2018, **NDEr Laszlo from Hungary** told us that he was out-of-body following a car crash.

Laszlo was standing some distance from the crash site. He looked down at his [nonmaterial] "body" and could see his spirit form. When a man ran past him to the crash, the man's body passed through the

spirit form of Laszlo's shoulder. Laszlo described the effect of the interaction as a kind of *wafting* of his spirit form, the way a hand wafts through cigarette smoke.

These NDErs report a subtle interaction between the NDEr's nonmaterial "body" and *solid matter*. Their sense of *resistance* indicates a *weak force* is exerted by matter as their nonmaterial "body" passes through it. According to Newton's third law of motion, for every force of one object on another, there is an equal and opposite opposing force. So, an NDEr's experience of resistance indicates that matter exerts a force on their "body" when it passes through solid matter. We can conclude that there is a *new physical force* of interaction which occurs between the nonmaterial mind and solid matter. The force is very weak but is nonetheless present. (See Section 12D for a case of an out-of-body person exerting a measurable force on physical matter.)

6B-3. Interactions with another person's body through neural processes

Some NDErs report interacting with another person's physical body during their NDE. These interactions take two different forms:

- "*Sensing*" the neural electrical activity in the other person's body. For example, **Raymond Moody personally resuscitated a woman:**

"I saw her have a cardiac arrest and immediately started heart massage. She told me later that while I was working on restarting her heart, she was going up above her body and looking down. She was standing behind me, trying to tell me to stop, that she was fine where she was. When I didn't hear her, she tried to grab my arm to keep me from inserting a needle in her arm for injecting intravenous fluid. Her hand passed right through my arm. But when she did that, she later claimed that she felt something that was the consistency of 'very rarified gelatin' that seemed to have an electric current running through it. I have heard similar descriptions from other patients" (41: 8–9).

Moody is the author of *Life after life* (40) in which he coined the term *near-death experiences*. This particular case indicates that as his patient passed her nonmaterial hand through Moody's physical arm, she perceived a subtle *resistance* as a "very rarified gelatin" consistency. She also perceived a kind of electric current running through his arm, suggesting that she *sensed* the neural activity in his arm muscles as he moved to insert the IV needle. Moody has heard other similar cases.

- "*Triggering*" neural electrical activity in the other person. One example comes from **7-year-old NDEr Jerry Casebolt** whom we mentioned earlier (Section 4A). He reported that while out-of-body, a German shepherd sensed his presence in a playground outside the hospital. The dog playfully jumped up and barked at him until the Light Being accompanying Jerry told him to stop his "childish" diversion. Back in the hospital, Jerry observed a frail lady in a bed near the nurses' station. The old lady probably had dementia and would periodically yell out that she hurt, that she was too cold or too hot. The other patients in the area were startled when she yelled out unexpectedly and were agitated. Jerry (called 'Gary' in the narrative) felt obligated to do something to "fix the problem."

"He floated over to her bed. He tried tickling her nose with his finger. Surprisingly, after a few attempts, Gary appeared to be successful. To her, it may have felt like a feather or a chilly breeze, but to Gary it was a finger. Reflexively, it made her sneeze. As long as she was sneezing, she wasn't hollering."

In a personal communication, Jerry told us that he repeated two more times tickling the lady's nose until she sneezed.

“Gary was amused with himself and the [other] patients welcomed the change, at least at some level. Several of them sighed with temporary relief from the noise. ... The Light Being did not approve of Gary’s ‘childish’ antics any more than the incident with the dog. It turned Gary away from the old lady and sternly transmitted ‘That is enough’” (10: 82–83).

These two types of interactions between the NDEr’s nonmaterial “body” with another person’s physical body are evidence of interaction *specifically* with neural structures, inducing both phenomenal *sensations* in the NDEr and neural *activations* in the other person. (See Section 11C for another instance of interaction with an out-of-body person inducing neural activations in a living person.) Both of these types of cases support the idea that the mind can interact *specifically* with neural structures in the brain.

6B-4. Summary of NDE evidence for mind-brain interactions

- First, there is strong evidence that the *out-of-body mind interacts with physical processes* such as light, sound waves in the air, and solid matter, giving rise to subjective sensations in the NDEr’s mind. The NDEr later reports accurate veridical perceptions in the physical realm. There is no reasonable explanation for these veridical perceptions except that the out-of-body nonmaterial mind was able to *interact with physical processes* at the time of the events, resulting in the accurate perceptions.
- Second, there is evidence that *a new force is involved in mind-to-matter interactions*. A subtle, previously unrecognized *push-pull force* seems to exist when the out-of-body mind entity passes through solid matter, giving rise to the subjective sensation of resistance or increased density in the NDEr. NDEr Howard (Section 2C) felt the densities of the insulation as he rose up through the ceiling, the 10-year-old NDEr felt resistance as she pushed through the door, and Raymond Moody’s patient felt his arm to have a “very rarified gelatin” consistency when she passed her out-of-body “hand” through his arm. In addition, a physical object can interact with the NDEr nonmaterial “body,” as happened when the man ran through Laszlo and “wafted” his out-of-body shoulder.

The interactive force works both from the mind “pressing” through a solid object and feeling its resistance and from a solid object passing through the mind’s “body” and causing a distortion of the body’s form. Both forms of interaction suggest a subtle *two-way interactive force* exists between the nonmaterial mind and matter. Therefore, it is very plausible that the mind can interact causally—not just receptively—with physical matter to produce an effect.

- Third, there is evidence that when NDErs interact with another person’s physical body, *the mind can interact specifically with neural electrical processes*. Raymond Moody’s out-of-body patient passed her hand through his arm and felt an electric current running through it, apparently sensing the neural electrical activity in the arm muscles as Moody inserted the IV needle. Jerry Casebolt tickled the old lady’s nose with his out-of-body “finger” and caused her to sneeze three times. The interaction of the finger with the woman’s nose apparently stimulated a tickling sensation by triggering neural activity causing the sneezing. These cases suggest that causal interactions specifically between the mind and neural electrical processes are plausible, both to *sense* neural “action potentials” and to *trigger* action potentials. Thus, it is plausible that the mind can both *sense* and *trigger* electrical brain activity.

Most skeptical philosophers and scientists will say it’s fine to show that it’s *possible*—and even *plausible*—that the nonmaterial mind entity can interact with the brain, but it’s *also* necessary to present a plausible *mechanism* how this can actually work. How does the mind entity actually work with the brain to produce phenomenal awareness?

6C. A plausible mechanism for mind-brain interaction

The mind entity hypothesis is a form of “**interactionist dualism**” that holds that the mind and brain are separate entities that causally interact with one another to produce awareness. As part of this hypothesis, it’s important to include a plausible mechanism for *two-way causal interactions* between the nonmaterial mind and the brain.

6C-1. Neural activity is required for *all* awareness including mental content in the mind

In a series of experiments in the 1970s, neurophysiologist Benjamin Libet established that one’s *conscious awareness* of anything requires a *minimum duration* of neural electrical activity—typically 300–500 milliseconds, up to about half a second. Libet concluded (32: 106) that this process of “coming to awareness” applies to *all* mental content, whether the content of awareness is a perception, a thought, an intention, or a memory.

Libet’s “time on” requirement becomes important when we consider the mental content the mind *generates internally*, such as thoughts, plans, daydreams, etc. In order for internally generated mental content to come to awareness, *the mind must first trigger neural activations* in appropriate brain regions which then bring the internal content to awareness. This seems paradoxical—how the mind must first *impress its content* on specific brain regions to bring that content to awareness. However, this process explains why most NDErs experience their thoughts to be speeded up while out-of-body and subsequently dulled down when returning to ordinary consciousness. Also, if brain function is somehow impaired (e.g., with alcohol), the process of coming to awareness can be hindered or blocked.

6C-2. How does the nonmaterial mind actually work with the brain?

In our theory, the physical interface between the nonmaterial mind and the brain is in the gray matter—the outermost 2–4 mm portion of the cortex, including in all the folds of the brain. The mind entity interfaces with the *apical dendrites*, the dendritic structures that *project vertically* to the surface of the cortex.

The mind interface works in two ways:

- **The *brain-to-mind* interface (for sensory input)** occurs when neural activations occur in sensory neural areas. When a sensory neuron “fires,” its action potential propagates *upwards* from the cell body throughout the entire dendritic structure (58). When a large number of neurons fire together in a brain region, these “backward-propagated” pulse-like activations are *detected* by the mind, *bringing the sensation to awareness*.
- **The *mind-to-brain-to-mind* interface (for internal mental content)** occurs when the mind *induces* neural activations in a brain region to *impress* a specific mental content on it, for example a concept or image from the mind. The *mind-induced* neural activations are then *detected* by the mind, *bringing the mental content to awareness*. The neural activations act as a kind of *mirror* to reflect the mental content back to the mind.

How does the nonmaterial mind actually induce neural activations? We propose that the mind can alter the molecular configuration of the “ion channels” in the apical dendrites. When these ion channels open, an action potential is triggered in the neuron. The energy required to open an ion channel is very small, on the order of the subtle force of interaction between the mind and physical matter.

In both cases, neural activations are necessary to bring sensations or mental content to awareness. *When united with the brain and body*, the mind cannot become aware of its own sensory or mental content without these neural activations. This view of mind-brain interactions is consistent with the close correlation of all in-

body mental states with brain activity and with Libet's findings that a minimum of neural activity is needed for both sensory and mental content to come to awareness.

Our proposed mind-brain mechanism is *plausible* because NDE evidence strongly suggests (a) that a *previously unrecognized force of interaction* exists between the NDEr's mind and solid matter, and (b) that the nonmaterial mind can interact with neurons to both *sense* and *trigger* action potentials.

7. Philosophical objections to the mind entity theory

Most philosophers and scientists reject interactionist dualist theories, like our mind entity theory, because it would be impossible for a nonmaterial mind to interact with a physical brain. The predominant view, *physicalism*, considers consciousness and the mind to be purely the result of physical brain processes.

7A. Addressing philosophical objections to interactionist dualism

Philosophers reject dualist theories because they are "obscure" and "mysterious". Philosopher John Martin Fischer commented on nonphysical mechanisms of consciousness:

[I]t is mysterious how these [nonphysical mental] mechanisms are supposed to work, and, specifically, how they would interact with the physical world. ... Causation implies a mechanism, understanding causation implies understanding the mechanism, and the mechanism of interaction across the physical and nonphysical realms is obscure—perhaps essentially so (13: 151).

However, there is strong evidence that the *out-of-body mind interacts with physical processes* giving rise to subjective phenomenal sensations in the NDEr's mind. And there is evidence that a subtle, previously unrecognized *two-way force* is involved in mind-to-matter interactions.

Furthermore, the proposed mechanism for mind-brain interactions (Section 6C-2) involves:

- A point of contact for the mind to interface with the brain—in the apical dendrites of the outer layers of the cortex, and
- A push-pull force at the mind-brain interface—(a) the mind triggers neural action potentials by opening dendritic ion channels to impress mental content on brain regions, and (b) backward propagation of action potentials brings sensory and mental content to awareness.

7B. Three specific challenges to interactionist dualism

7B-1. The notion that the mind as a "thing" is a category error

Philosopher Gilbert Ryle (57) famously objected to the notion that the mind is a thing or substance that can unite with the brain and body (as a "ghost in the machine"), arguing that it is an error to treat the mind as an object because the "mind" is simply the collection of a person's dispositions and capacities resulting from brain activity. As such, minds are in a *different category* from physical objects like brains.

However, NDEs provide strong empirical evidence that the mind entity is an objectively real thing. In particular, the NDEr's nonmaterial out-of-body mind can be *seen by others* (Section 4). While out-of-body, all of the NDEr's dispositions and capacities are embodied *in the mind* and are even enhanced—independent of the physical brain and body (Sections 3A, 3D). Furthermore, NDErs consistently report reuniting with the physical body and existing within it (Section 3B). Therefore, the nonmaterial mind is in the *same category* as physical objects—the mind is an objectively real thing and unites with the brain and body. The NDEr's dispositions and capacities are not the result of brain activity but are embodied in the mind, both "in-body" and "out-of-body."

7B-2. The causal pairing problem

An important objection to interactionist dualism comes from the original description of the mind by René Descartes. For Descartes, the mind is an immaterial thing that does not exist in physical space and has no dimensions. The “pairing problem” (26: 50–56) questions how a nonmaterial mind that exists outside physical space can causally interact with a physical object (like a brain). Any causal interaction must occur in spatial relation to the physical object.

In contrast to Descartes’s theory, the mind entity theory holds that a nonmaterial mind is an extended three-dimensional object in physical space which can merge fully and pair with a physical brain and body. The mind and brain are located in intimate spatial relation to one another and exert direct causal interaction with each other (Section 6C-2). The mind entity theory thus addresses the objections posed by the “causal pairing problem.”

7B-3. The causal closure of the physical

In philosophy, “physical causal closure” (26: 214–217) states that all physical states have pure physical causes or that physical effects have only physical causes. If one traces the “causal ancestry” of a physical event, one need never go outside the physical domain.

In our theory, the mind is nonmaterial but *interacts* with physical processes and thus takes part in physical causation. In particular the mind interfaces with the brain at specific points of contact in the apical dendrites at the surface of the cortex. A *two-way push-pull force* is involved in mind-to-matter interactions (Section 6B-4). The mind *triggers* neural action potentials to open dendritic ion channels and *senses* the backward propagation of action potentials (Section 6C-2). Therefore, the mind entity theory satisfies the “causal closure of the physical.”

A skeptical philosopher can argue that the mind entity is *not a physical entity*, that is, it is not recognized by current physics theory. More specifically, the mind entity embodies *mental* properties, which are dubious as physical properties. In both cases, we respond that the domain of physical reality and specifically the domain of physics *need to be extended* to include the existence of mind entities and their properties.

7B-4. Extending current naturalism

We suspect that many philosophers and scientists fear that any departure from physicalist explanations of NDEs jumps directly to *supernaturalism*. On the contrary, the mind entity theory is hardly a leap into supernaturalism. The insights derived from NDE phenomena lead to a generalized, coherent explanation of NDEs *and* in-body neurological processes. In Section 16, we show that our theory will permit the development of a theory that *extends* the current physicalist naturalism to include *nonmaterial* entities, forces, and interactions.

8. Are there other explanations for NDE phenomena?

Many skeptics assert that NDE phenomena are merely the brain states of a dying brain, which can explain all of its main elements: feelings of peace, feeling separated from the physical body, passing through a tunnel, seeing a bright light, having a life review, etc.

8A. Physiological and neurological explanations

A number of physiological and neurological factors are generally cited in these explanations of NDEs (21: 217–234). However, none of these factors, *alone or in combination*, is adequate to explain NDEs, because (a) the reported experiences bear only slight resemblance to NDEs, (b) many NDEs occur under conditions without the suggested factor, and/or (c) in cases where the physiological or neurological factor is present, NDEs are not reported in even a large percent of cases. For example:

Altered blood gas levels is the most frequently cited cause of NDEs. Cerebral hypoxia or anoxia (too little or no oxygen), as well as hypercarbia (elevated carbon dioxide) do sometimes involve NDE features (tunnel vision, bright lights, sense of floating, brief fragmented visual images). However, their primary features include symptoms not found in NDEs—jerking movements, compromised memory, tingling sensations, confusion upon waking, etc. Moreover, NDEs occur in conditions *without* hypoxia or anoxia (non-life-threatening illnesses, falls, etc.) and in patients where measured blood levels do not reflect lowered oxygen or elevated carbon dioxide levels. In fact, NDEs are shown to be associated with *increased* oxygen levels, or with levels the same as those of non-experiencers. No study has ever shown *decreased* levels of oxygen during NDEs (20: 109). Finally, NDEs occur in only 10-20% of cardiac arrest cases where anoxic conditions are very likely to occur.

Other factors that are cited include **neurochemical factors** (the release of endorphins or other neurochemical substances), and **abnormal brain electrical activity** (temporal lobe seizure or other abnormal activity).

All of these factors suffer the three shortcomings noted above. In addition, these explanations cover only a few NDE features—being out-of-body, a tunnel, a brilliant light, and so on. However, as NDE researcher Ken Ring pointed out more than 40 years ago:

“Any adequate neurological [or physiological] explanation would have to be capable of showing how the *entire complex* of phenomena associated with the core experience (that is, the out-of-body state, paranormal knowledge, the tunnel, the golden light, the voice or presence, the appearance of deceased relatives, beautiful vistas, and so forth) would be expected to occur in subjectively authentic fashion as a consequence of specific neurological events triggered by the approach of death. ... A neurological [or physiological] interpretation, to be acceptable, should be able to provide a *comprehensive* explanation of *all* the various aspects of the core experience” (52: 216).

8B. Explaining away NDEs with ad hoc hypotheses

Most skeptics focus on only one or two aspects of an NDE account in order to “explain away” that account (55: Chapter 11). Once several NDE accounts have been rationalized in this fashion, the skeptic claims that NDEs have now been fully explained in purely physical terms.

For example, in cases of veridical information which the NDEr reports having obtained during their NDE, a skeptic would claim that the NDEr actually got the information *just before* losing consciousness or *sometime after* regaining consciousness. So in some of the cases cited above, a skeptic might propose the following explanations:

- *Before* his cardiac arrest, Laurin Bellg’s patient Howard (Section 2C) overheard two nurses discussing the nurse-training center located on the floor above and subconsciously incorporated it into his NDE.
- *After* his recovery, Tony Meo (Section 2D) believed he had traveled to his home in Florida during his surgery and *deduced* that the mail would most likely be strewn on the dining room table. He made a *lucky guess* that there was a Danish office supply catalog there.

In their book, philosophers John Martin Fischer and Benjamin Mitchell-Yellin (14) engaged in this form of rationalization to explain different aspects of four different NDE accounts in purely physical terms. In each of these accounts, they crafted the rationalization to fit the specific details of each NDE.

The problem with such speculations is that they apply only in *specific cases* but not in other similar cases. These explanations are called *ad hoc* hypotheses, that is, explanations for specific cases that are introduced to save the physicalist explanation of NDEs from being disproven or “falsified” (36: 74–77).

There are several problems with Fischer and Mitchell-Yellin’s analysis of NDE cases:

1. **They failed to explain *all* anomalous aspects of the NDE cases.** For example, they explained how NDEr Pam Reynolds later accurately recalled overhearing a *conversation* about her vein size that took place during her operation, because, according to Fischer, the conversation registered somewhere in her brain while under anesthesia. But they did not explain how she was able accurately to describe the *shape* of the bone saw that was used while she was anesthetized and her eyes were taped shut; or how she reported having observed—accurately—that her body needed two shocks to restart her heart (55: Case 3.29).
2. **They failed to *validate* their explanations of NDE cases with the facts of the case.** For example, an NDEr with dentures was able to recognize the nurse who had removed his dentures and placed it on a shelf of a cart, because, according to Fischer, he became familiar with the faces of the medical staff after his recovery. In fact, the man immediately recognized the male nurse on first seeing him a week later after his recovery from coma (55: Case 3.7).
3. **They failed to develop *general* explanations that can be applied to *different* cases with similar characteristics.** For example, in the Pam Reynolds case, they explained the ability to accurately recall *auditory* experiences while under anesthesia. But it would be a stretch to explain Al Sullivan’s (Section 2A) ability to recall unusual *visual* experiences—the surgeon “flapping” his arms—with Sullivan under anesthesia, his eyes taped shut and his head behind a surgical drape (55: Case 1.5).
4. **The repeated reliance on *ad hoc* hypotheses to explain NDEs indicates that the physicalist theory *lacks coherence*.** One of the aims of science is to find models that will account for *as many observations as possible* within a *single coherent framework*.

8C. A common proximate cause for all NDEs

NDEs were first noticed in cases in which the person was close to death or in a state of extreme psychological or physical distress. In fact, NDEs occur in people who are *not* near death or in distress. For example:

In a case we described earlier, **Vicky** (Section 3C-3) recounted her father tickling her under the chin when she was an infant. “It made me laugh so hard I would fly up through the top of my head and out of my body. From the ceiling I’d look back at my little body on the couch.” These *near-death-like* experiences (NDLEs) can occur even when the person is not near death but, in fact, is *completely healthy*. Nonetheless, they score as *valid NDEs* on the NDE Scale.

Another case we described earlier was the **10-year-old NDEr’s experience** during sleep (Section 6B-2). Even though she was not near death, her experience included being out-of-body, being surrounded by a bright light, having feelings of peace and calmness, being filled with a feeling of love, wanting to be immersed in the light, having veridical perceptions that she later verified as accurate, and finally being snapped back to her body in bed. Her NDLE would score at least 10 on the NDE Scale.

In a study at the University of Liège, Belgium (8), researchers compared NDE reports resulting from life-threatening events to NDE-like experiences occurring after *non-life-threatening* events, such as during sleep, fainting, meditation, drug or alcohol use, etc. Surprisingly, the results showed *no significant difference* in either NDE *content* (e.g., feelings of peace, separation from the body, a brilliant light) or NDE *intensity* between the near-death-like experiencers (NDLErs) and the so-called “real” NDErs. The average NDE score in the study was 16 for “real” NDErs and 17 for NDLErs.

This finding means that neither the proximity to death nor specific physiological or psychological factors proposed by skeptical theorists influenced the actual content or intensity of the NDE.

Thus, NDEs cannot be distinguished whether the person was perfectly healthy or in cardiac arrest: They are the *same experience*. The results of the study suggest that there is no physiological or psychological explanation that can account for all NDEs. Rather, they strongly suggest that NDEs are a common altered state of consciousness that can be triggered by *many different* types of prior conditions or may indeed have *no* apparent triggering event. So the altered state of consciousness in all NDEs—feeling separated from the body, seeing a brilliant light, entering an unearthly world—suggests that there is a common *proximate* or *immediate cause* of the experience.

A life-threatening *condition* may occur—such as cardiac arrest—but if the proximate *cause* is absent, no NDE occurs. Conversely, a *non-life-threatening condition*—such as meditation or sleep—may trigger the proximate *cause*, resulting in an NDLE that is indistinguishable in content and intensity from NDEs occurring in near-death circumstances (35).

8D. Other explanations fail in light of a common proximate cause for NDEs

In light of very strong evidence that NDEs occur in non-life-threatening circumstances—in normal, perfectly healthy individuals—the physiological and neurological explanations described earlier cannot apply to *all* NDEs, let alone provide a *comprehensive* explanation of *all* the various aspects of the core experience.

What could be the unifying factor that comes to bear in all NDEs? What is *common* in all of these NDE and NDLE cases?

Nearly 80% of NDErs report feeling separated from their body (33). Therefore, we propose that the common proximate cause of all NDEs is *in fact* the separation of the mind from the physical body. Various physiological and psychological conditions can trigger the separation of the person’s conscious mind from the body, or the separation can occur with no apparent prior condition.

The question still remains *why*, under seemingly identical circumstances, some people’s minds separate from their bodies and others’ do not. Nevertheless, our separation hypothesis remains consistent with the evidence regarding the occurrence of NDEs and NDLEs.

9. Summary of the evidence that the mind is a separate entity independent of the body

In Part 1 of this essay, in Sections 2–8, we presented the evidence from NDEs that (1) the human being consists of a nonmaterial “mind” and a physical body. (2) Although the mind is intimately integrated with the body, it is an independent, objectively real aspect of the person that can separate from the body during an NDE. (3) All of the person’s cognitive faculties reside in the mind, not in the brain. However, while in the “in-body” state, the mind is *dependent* on brain activity for normal cognitive activity. And (4) the nonmaterial mind interacts with the brain to produce conscious awareness. The mind’s interactions with the brain involve a point of contact and a two-way force of interaction between the mind and the brain.

In Section 2, we presented strong evidence (a) that the NDEr’s *experiences* in the physical realm are real; (b) that the NDEr’s mind or consciousness *separates* from the body during the NDE; and (c) that the mind operates *independent of the body* (Section 2D).

In Section 3, we presented strong evidence (a) that the NDEr’s mind acts as a *cohesive unit* (Section 3A) and (b) carries *the essence of the person* (Section 3D). (c) The NDEr is the *same person* when out-of-body as within their physical body (Section 3B). (d) The NDEr realizes that their out-of-body mind is *significantly expanded and enhanced than when in the physical body* and that their physical body is *not their real self* (Section 3C).

In Section 4, we presented strong evidence (a) that the mind entity itself is *objectively* real; and (b) that the NDEr’s out-of-body mind is *objectively present* to others. Therefore, (c) the *NDEr’s mind entity itself is an objectively real thing, a real being. The separate mind entity really exists* (Section 4D).

In Section 5, we presented the mind entity hypothesis: (a) the human being consists of a nonmaterial “mind” that is spatially coextensive and intimately integrated with the physical body. (b) There are two states of consciousness: an “in-body” state, whereby the mind is dependent on brain activity for normal cognitive functions, and an “out-of-body” state whereby the mind is separated and can function completely independent of the brain and body. Given the evidence in Sections 2–4, (c) *the mind entity hypothesis is a plausible picture of the human being*.

In Section 6, we presented the evidence (a) that the nonmaterial *mind is able to interact with physical processes* (Section 6B-1); (b) that a subtle, previously unrecognized *two-way interactive force is involved in mind-to-matter interactions* (Section 6B-2); and (c) that *the mind can interact specifically with neural electrical processes—both to sense and to trigger neural electrical activity* (Section 6B-3). Finally, we presented (d) a *plausible mechanism for two-way causal interactions* between the nonmaterial mind and the brain (Section 6C).

In Section 7, we presented responses to the philosophical challenges to our interactionist dualist mind entity theory, showing (a) that the nonmaterial mind is *in the same category* as physical objects (Section 7B-1); (b) that the mind entity theory addresses the “*causal pairing problem*” (Section 7B-2) and (c) satisfies the “*causal closure of the physical*” (Section 7B-3).

In Section 8, we presented other explanations that scientists have proposed to explain NDEs and show that they fail. (a) To be acceptable, neurological, physiological, or psychological interpretations should be able to provide a *comprehensive* explanation of *all* the various aspects of the core experience (Section 8A). (b) Explanations that rely on *ad hoc* hypotheses to explain NDEs ultimately are *unscientific* because they fail to account for multiple cases in a *single coherent framework* (Section 8B). (c) There is strong evidence that there must be *some unifying factor* which comes to bear in *all* NDEs—whether in life-threatening situations or not—that is, some *immediate* or *proximate cause* that applies in all NDEs (Section 8C). (d) Therefore, other explanations fail because they don’t address all situations in which NDEs arise (Section 8D).

Thus, in Part 1, the convergence of strong NDE evidence presented up to this point supports the fact—beyond any reasonable doubt—that **the mind of a person can separate from the physical body and operate independent of it** (Sections 2–4). There is a ***plausible mechanism for two-way causal interactions between the nonmaterial mind and the brain*** (Sections 5–6) which successfully **answers the philosophical challenges** to interactionist dualism (Section 7). **Other explanations of NDEs that have been proposed**—for example that NDEs are caused by various physiological or neurological processes—**fail**, because they do not apply to *all* NDEs and do not provide a *comprehensive* explanation of *all* the various aspects of the core experience (Section 8).

However, skeptics can still argue that **NDErs may have been near to death but they did not actually die**, so NDEs do not provide credible evidence of survival of physical death.

Part 2: The essential aspect of the human being survives physical death

10. Evidence during NDEs from deceased persons

Encountering deceased persons is an important element in NDEs (e.g., Section 3B-2). Nearly half of NDEs report seeing or sensing the presence of someone in their NDE who had died earlier; none of the NDEs in Greyson's collection involved an NDEr mistakenly thinking a person still alive had died (20: 135–136). Frequently the focus of the NDEr's encounter with deceased relatives involves sorting out family relationships. The NDEr may later recognize the deceased relatives in old family photographs.

For example, in **Ken Leth's NDE at age eight** in 1963, he was met by many relatives on the Leth (pronounced "Let") side of the family:

"The people who stood out the most were two older couples, but there were many others with them. All of them were very nice, and they wanted to tell me who they were. But first they needed to know who I was. I felt incredibly small and overwhelmed when I said my name. 'I am Kenneth Leth,' I said with my tiny eight-year-old voice. A few of them recognized the Leth name; it got their attention. Then someone asked who my father was. 'Lyle,' I said. Many of them gasped when they realized they knew my father, 'Oh, you're Lyle's son.' I was a little boy, so I didn't understand all of the sudden thoughts that flooded into my head when they telepathically tapped into our family history.

"Two of the older women introduced themselves as my father's grandmothers. ... I was quickly introduced to a lot of departed souls from my earthly family. Both of my great-grandmothers on my father's side of the family came to me and introduced me to my great-grandfathers, their husbands. ...

"I'm rather proud of two oval framed photos that currently hang on the walls of my home. They are of my great-grandparents, whom I met back in 1963 in the far reaches of Heaven. The photos were taken in the early 1900s, and I immediately knew who they were when my living grandmother showed them to me many years after my NDE" (31: 57–61; personal communication, 2019).

The encounter with deceased relatives, friends, or acquaintances generally involves:

- The person may be recently deceased or they may be a relative or childhood friend who died years before.
- The NDEr may see the person in full figure, may see only their face, or may merely sense their presence.
- The NDEr generally *recognizes* the deceased loved one for who they are. They in turn recognize and acknowledge the NDEr. They may also give details about who they are, as Ken Leth's relatives did.
- The NDEr's encounter with the deceased loved one may include a resolution of a regret or a strained relationship with the person.
- Typically, the message to the NDEr from the deceased loved one is "It's not your time. You must go back."
- The loved one or acquaintance may also give the NDEr a message to bring back to someone still living.

Skeptics can object that these experiences are really due to the NDEr's expectation of meeting deceased loved ones because they realize they have died. Or the experience is due to wishful thinking or pure imagination. Any veridical information received from the deceased person is just a lucky guess.

How can we check that the deceased person is real and is the person they appear to be to the NDEr? There are two situations in encounters with a deceased person that provide strong evidence.

10A. Persons known to the NDEr but not known to have died

For one thing, if the NDEr *recognizes* the deceased person and *receives veridical information* during the encounter that they did not know at the time but is later verified after the NDE, this is strong objective evidence that the deceased person was actually the person known to the NDEr.

10A-1. The case of 9-year-old Eddie Cuomo

Physician K. M. Dale related the case of 9-year-old Eddie Cuomo, whose fever finally broke after nearly 36 hours of anxious vigil on the part of his parents and hospital personnel. As soon as he opened his eyes, at 3:00 in the morning, Eddie urgently told his parents that he had been to heaven, where he saw his deceased Grandma Cuomo, Auntie Rosa, and Uncle Lorenzo. His father was embarrassed that Dr. Dale was overhearing Eddie's story and tried to dismiss it as feverish delirium.

Then Eddie added that he also saw his 19-year-old sister Teresa, who told him he had to go back. His father then became agitated, because he had just spoken with Teresa, who was attending college in Vermont, two nights earlier; and he asked Dr. Dale to sedate Eddie. Eddie began to cry. "Is Teresa going to stay in heaven with Grandma and Auntie Rosa and Uncle Lorenzo? Does that mean she won't be home for Christmas time? I don't want her to stay with them. I want her home with us!"

Later that morning, when Eddie's parents telephoned the college, they learned that Teresa had died instantly in an automobile accident just before midnight, and that college officials had tried unsuccessfully to reach the Cuomos at their home to inform them of the tragic news (19: 167; 59: 42–46).

Eddie's sister Teresa died just three hours *before* Eddie woke up from his coma. The objective fact of Teresa's death was not known to anyone in Eddie's family until after he had reported meeting her in his NDE.

10A-2. The case of Jack Bybee

NDEr Jack Bybee was hospitalized with severe pneumonia with periodic seizures at age 26 in Cape Town, South Africa. He was cared for by a nurse named Anita who had taken time off on the weekend to celebrate her twenty-first birthday. Jack had his NDE on that weekend.

"In my NDE, I met Nurse Anita on the other side. 'What are you doing here, Anita?' I asked. 'Why, Jack, I've come to fluff up your pillows, of course, and to see that you are all right. But, Jack, you must return, go back. Tell my parents I'm sorry I wrecked the red MGB. Tell them I love them.' Then Anita was gone—gone through and over a very green valley and through a fence, where, she told me, 'there is a garden on the other side. But you cannot see it. For you must return, while I continue through the gate.'

"When I recovered, I told a nurse what Anita had said. This girl burst out into tears and fled the ward. I later learned that Anita and this nurse had been great friends. Anita had been surprised by her parents, who loved her dearly and had presented her with a red MGB sports car. Anita had jumped into the car, and in her excitement raced down the highway, De Waal Drive, along the slopes of Table Mountain, into 'Suicide Corner' and a concrete telephone pole. But I was 'dead' when all that happened. How could I possibly know these facts? I knew them as stated above. I was told by Anita in my experience" (20: 132–133).

Note that Anita requested a message be given to her parents. Also note that the details of Anita's statements to Jack about the red MGB were verified as objective facts by Anita's friend. This case was not due to wishful thinking because Jack had no desire to see nurse Anita on her weekend off.

See Ref. 55, Chapter 6 for additional cases of this sort.

10B. Persons not known to the NDEr

If the deceased person is not known to the NDEr at the time of the NDE but is later verified as the person they presented themselves to be, this is another form of strong evidence that the deceased person was objectively real.

10B-1. The case of the man who looked at me lovingly

The unknown deceased person can later be verified through photographs, as Ken Leth did when his grandmother showed him portraits of his four great-grandparents.

“During my NDE following a cardiac arrest, I saw both my dead grandmother and a man who looked at me lovingly but whom I didn't know. Over ten years later my mother confided on her death-bed that I'd been born from an extramarital affair; my biological father was a Jewish man who'd been deported and killed in World War II. My mother showed me a photograph. The unfamiliar man I'd seen more than ten years earlier during my NDE turned out to be my biological father” (64: 32–33).

10B-2. The case of the unknown sister Rietje

The unknown deceased person can later be verified by name and the circumstances of their death.

“When I was five years old I contracted meningitis and fell into a coma. ‘I died’ and drifted in a safe and black void where I felt no fear and no pain. I felt at home in this place. ... I saw a little girl of about ten years old. I sensed that she recognized me. We hugged and then she told me, ‘I'm your sister. I died a month after I was born. I was named after your grandmother. Our parents called me Rietje for short.’ She kissed me, and I felt her warmth and love. ‘You must go now,’ she said. ... In a flash I was back in my body. I opened my eyes and saw the happy and relieved looks on my parents' faces. When I told them about my experience, they initially dismissed it as a dream. ... I made a drawing of my angel sister who had welcomed me and repeated everything she'd told me. My parents were so shocked that they panicked. They got up and left the room. After a while they returned. They confirmed that they had indeed lost a daughter called Rietje. She had died of poisoning about a year before I was born. They had decided not to tell me and my brother until we were old enough to understand the meaning of life and death” (64: 71–72).

Cases of this sort can't be due to expectation or wishful thinking, because the deceased person was completely unknown to the NDEr at the time.

See Ref. 55, Chapter 5 for additional cases of this sort.

10C. What do these cases mean?

In these cases, the deceased person communicated accurate information that could not have been obtained by the NDEr by any other means, giving strong credibility that the encounters were real encounters with real human beings who once lived on Earth. Veridical communication with someone who has already died is *evidence implicitly for personal survival of physical death*.

In the cases in 10A, the NDEr *recognized* the person but did not know the person had died. In Eddie Cuomo's case, his sister Teresa, ten years older than him, told him he had to go back. In Jack Bybee's case, Jack asked Anita what she was doing there (on the "other side") and Anita responded in a cheerful, flirtatious manner as she had done when she cared for him in the hospital. Then Anita gave Jack the message to give to her parents with veridical information about the circumstances of her death.

In the cases in 10B, the NDEr doesn't know who the person is. In the one case, years after his NDE, the NDEr recognized the man who looked at him fondly from a photograph as his biological father. In the other case (we assume it is a boy), the young boy's parents immediately confirmed the veridical facts that his older sister, Rietje, had told him.

The encounters with deceased persons involve more than simple recognition. Generally there is a full encounter and conversation with the deceased persons, in which they give details about who they are and exhibit characteristic aspects of their personality and their relationship to the NDEr. Recall the warm exchange between Ken Leth and his Leth family relatives and the flirtatious exchange Anita had with Jack. In 10B-2, Rietje hugged her little brother. Even in the encounter in 10B-1, the NDEr felt the love from his biological father.

The exchange with the deceased loved one can involve the resolution of a regret or a strained relationship with the deceased person. Here is an example of such an encounter from **Laurelynn's NDE** during surgery:

"[N]ext I felt a presence approaching from my right, upper side. I was feeling even more peaceful and happy, especially when I discovered it was my thirty-year-old brother-in-law who had died seven months earlier. Although I couldn't see with my eyes or hear with my ears, I instinctively knew that it was him. He didn't have a physical form, but a presence. I could feel, hear, and see his smile, laughter, and sense of humor. It was as if I had come home, and my brother-in-law was there to greet me. I instantly thought how glad I was to be with him because now I could make up for the last time I had seen him before his death. I felt bad about not taking the time out of my busy schedule to have a heart-to-heart talk with him when he had asked me to. I felt no remorse now, but total acceptance and love from him about my actions" (54: 29).

The skeptical explanations for encounters with deceased persons—that they are due to expectation, wishful thinking, imagination, or a lucky guess—don't hold up for these particular types of cases:

- The NDEr can't be *expecting* or *wishing* to meet someone whom they know is still alive or whom they don't know exists. There appears to be some *other influence* that draws particular deceased persons to the NDEr—usually a strong familial connection or a close friend relationship; less frequently, it can be the need to give the NDEr a message to living persons.
- The unusual and unexpected—yet precise—nature of the veridical information received from the deceased person can't be the result of the NDEr's imagination or a lucky guess.

These cases are strong indications of actual contact with those who have died and therefore that *the minds of deceased persons continue after physical death*. Furthermore, in these cases, the deceased person seeks contact with living people in order to convey information to them, which suggests that the deceased person is aware of and cares for those still living on Earth. The reality experienced by deceased persons appears to be a *shared reality* with human beings living on Earth.

11. Evidence from shared experiences during the actual death of the physical body

Skeptics can still argue that the evidence of deceased persons appearing in NDEs is not sufficient in itself. They want conclusive evidence that the NDEr could *continue on* to actual physical death.

11A. What are shared death experiences?

In many cases, someone attending a dying loved one experiences the *dying process* along with the loved one. These experiences are called “shared death experiences” or SDEs. There are many elements associated with SDEs, including a number of elements very similar to NDEs. As the loved one is dying, one or more people in their presence, shared death experiencers (SDErs), may experience:

- The geometry of the room may change—the walls or ceiling may shift. An unusual light may fill the room or an ethereal music may be heard.
- The SDErs may see the dying person’s spirit leave the physical body. The spirit body may be a replica of the physical body, a structured light, or a mist of golden or grayish color. The spirit then leaves through the ceiling.
- The SDEr may feel an energetic jolt as the dying person’s spirit leaves their body and interacts with the SDEr’s own body.
- The SDEr may leave their own body and accompany the deceased person out-of-body.
- The out-of-body SDEr may witness the dying person’s life review and they both relive the events together.
- The SDEr may be told by the deceased person, “It’s not your time; you need to go back.”
- The SDEr may see into another realm, may see a tunnel open, or may see deceased relatives and friends of the dying person come to escort the person to the other realm.
- The SDEr ultimately finds themselves back in their physical body beside the deceased body of their loved one.

In these cases, the SDEr becomes an *objective eyewitness* of the process of dying. Some actual cases of SDEs follow.

11B. The case of Dr. Jamieson and her mother

Dr. Jamieson was on the faculty of the Medical College of Georgia when Raymond Moody attended its medical school. She related to Moody that her mother unexpectedly had a cardiac arrest at home. Dr. Jamieson happened to be visiting her mother and ended up administering CPR.

“I continued to work on her for a long time, maybe thirty minutes or so, until I realized that any further effort was futile and that she was dead. At that point I stopped and caught my breath.’ ... Suddenly, Dr. Jamieson felt herself lift out of her body. She realized that she was above her own body and the now-deceased body of her mother, looking down on the whole scene as though she were on a balcony. ... ‘I suddenly became aware that my mother was now hovering with me in spirit form. She was right next to me! ... I looked in the corner of the room and became aware of a breach in the universe that was pouring light like water coming from a broken pipe. Out of that light came people I had known for years, deceased friends of my mother. But there were other people there as well, people I didn’t recognize but I assume they were friends of my mother’s whom I didn’t know.’

“As Dr. Jamieson watched, her mother drifted off into the light. The last Dr. Jamieson saw of her mother, she said, was her having a very tender reunion with all of her friends. ‘Then the tube closed down in an almost spiral fashion, like a camera lens, and the light was gone,’ she said. ... [S]he found herself back in her body, standing next to her deceased mother, totally puzzled about what had just happened” (42: 6–7).

In this SDE, Dr. Jamieson was perfectly healthy and awake but felt herself drawn out-of-body with the “spirit form” of her deceased mother, looking down on her own body and her mother’s deceased body. She observed a tunnel of light and the forms of deceased persons whom she knew to be friends of her mother. She observed her mother’s “tender reunion” with her friends as they all receded into the light and disappeared.

Dr. Jamieson knew that her mother had died and was a *witness to the process of her mother’s death* and transition into a different realm, accompanied by her mother’s deceased friends and loved ones. In particular, the “spirit form” of her deceased mother was *objectively present* to her in the experience.

11C. The case of Dana and Johnny

When Dana’s husband Johnny was dying of lung cancer, she was with him the whole time he was in the hospital.

“[I] was holding on to him when he died. When he did, he went right through my body. It felt like an electric sensation, like when you get your finger in the electrical socket, only much more gentle. Anyway, when that happened our whole life sprang up around us and just kind of swallowed up the hospital room and everything in it in an instant.

“There was light all around: a bright, white light that I immediately knew—and Johnny knew—was Christ. Everything we ever did was there in that light. Plus I saw things about Johnny ... I saw him doing things before we were married. ... I saw him with girls when he was very young. Later I searched for them in his high school yearbook and was able to find them, just based on what I saw during the life review during his death. ...

“By the way, the life review was like a ‘wraparound.’ I don’t know how else to describe it. It was a wraparound scene of everything Johnny and I experienced together or apart. ... One of the funny things about this wraparound view of our life was that we had gone to Atlanta in the seventh grade, to the state capitol, where there was a diorama. So at one point we were watching this wraparound and watching ourselves in another wraparound—a diorama—where we stood side by side as kids. I burst out laughing and Johnny laughed too, right there beside me” (42: 11–12).

In this SDE, Dana and Johnny participated in a simultaneous life review of their lives. Dana saw things about Johnny’s relationship with girls in high school and she was able to find their pictures in Johnny’s high school yearbook, validating that the girls seen in the life review had attended high school with him. Dana also verified the experiences the two of them had together, like the seventh grade class trip to Atlanta. The life review was presented like a “wraparound” or panorama, similar to the form life reviews take in NDEs.

Dana also experienced Johnny’s spirit body pass through her own body and felt a gentle electric sensation in her physical body when that happened. Her experience was a *direct interaction* of his spirit body with her physical body, similar to the case of Jerry Casebolt tickling the patient’s nose causing the patient to sneeze (Section 6B-3).

Like Dr. Jamieson, Dana was healthy and awake but was drawn into a bright, white light and interacted with Johnny’s out-of-body spirit who appeared *objectively present* to her.

11D. What do shared death experiences mean?

In SDEs, the SDEr is healthy and awake. They may observe the dying person separate from the physical body at the time of death. Alternatively, they may themselves be drawn out-of-body with the deceased person's spirit body. The SDEr may observe the life review of the deceased person, similar to the life review in NDEs. The SDEr may observe deceased relatives or friends come to welcome and escort the deceased person to a different realm.

11D-1. SDEs are objectively real events, sometimes experienced by two or more people in attendance

The SDErs are healthy, credible eyewitnesses of the objective facts they observe. If more than one person is present with the dying person, their individual accounts frequently corroborate each other. For example:

Scott Taylor's shared death experience: In 1981, Scott Taylor's girlfriend Mary Frances and her seven-year-old son Nolan were involved in a horrific car accident. Mary Fran was killed outright and her son survived for an additional six days with a severe head wound. At the time of Nolan's transition, Scott and a number of Mary Fran's family were in the hospital room. Scott witnessed Mary Fran come "across the veil," approach Nolan, scoop him up out of his physical body, and hold him in a loving embrace. To his surprise, the two of them turned to Scott, embraced him and the *three* of them "went to the light." About 10 years later, Scott spoke with another family member who had the exact same experience at the time of Nolan's death: When Nolan flatlined, she witnessed Mary Fran come "across the veil" and scoop Nolan up out of his physical body. They embraced and she got to be part of that embrace. At some point they turned to her and the *three* of them "went to the light." She used the exact same words that Scott used to describe his experience (48: t=466s, t=1800s).

11D-2. SDErs are *objective eyewitnesses* to the process of dying

The SDEr observes the dying person's transition to actual death in three ways: (1) Many of the elements observed by SDErs are identical with NDE elements but are observed *from a third-person perspective*. (2) We can infer from the SDEr's descriptions many of the things the *dying person* experiences. These are the same phenomena as the *first-person perspective* in an NDE. Finally, (3) the SDEr *directly experiences* elements that commonly occur in NDEs:

- The SDEr observes that the dying person is out-of-body, meets deceased persons and a mystical being or presence. The SDEr observes that the dying person sees or is enveloped in a brilliant light and enters an unearthly or heavenly realm.
- We can infer from the SDEr's description of the dying person's reactions and behavior that the dying person experiences a life review. From the dying person's expressions of happiness or joy and peace, we can infer they are free from pain, having shed their physical body.
- The SDEr *themselves* describes that *their* senses were more vivid and their sense of time changed. The SDEr receives veridical information from their experience which they later verify as accurate. The SDEr is told by the deceased person that they need to return to the body or the SDEr just finds themselves back in the body.

11D-3. The process of dying is a continuation of the process in an NDE

The SDEr's observations indicate that the dying person experiences the same things that NDErs experience in their NDE. If we could administer the NDE Scale to the deceased person, the experience would be counted as an NDE. *The elements in the two processes are indistinguishable*. The only difference is that the dying person does not return to the physical body *but continues to exist after physical death*.

Thus, the “spirit body” of the deceased person observed by SDErs is the *same* as the *mind entity* that we propose is the essential aspect of the human being. The only difference between the deceased person and the NDEr is that the NDEr returns to physical embodiment whereas the deceased person moves on into another realm. Thus *the deceased person’s conscious Self survives physical death*.

12. Evidence from post death through after-death communication

Skeptics can still argue that despite the veridical information received by the SDEr *and* the corroboration from multiple SDEr witnesses, the evidence from SDEs of the transition of the dying person is still from a subjective experience. Is there any *objective evidence* that the dying person *actually continues to exist or do they just disappear or merge into nothingness* after their physical death?

12A. What is spontaneous after-death communication?

After-death communication (ADC) is the experience of spontaneous direct communication from a deceased family member or friend with a living person. In spontaneous cases, the deceased loved one always initiates the communication.

- The communication may be by sensing a presence, hearing a voice, feeling a touch, smelling a fragrance, or seeing the deceased person in partial or full appearance. The deceased person may appear completely solid or somewhat hazy, and is usually wearing their customary clothing.
- ADCs are commonplace and occur in normal, healthy people. The communication may occur while the witness is completely awake, while asleep, or while falling asleep or waking up. Even during sleep, the witness experiences the encounter as more real than everyday reality (compare with Section 3C-2).
- The deceased person may provide veridical information about a lost insurance policy or hidden valuables. They may warn the witness to avoid an airplane crash. In other cases, the deceased person is not known to the witness but is later revealed to be a relative.
- ADCs generally start within one year of the deceased person’s death but may occur many years later. They occur to both the bereaved and the non-bereaved. The witness may continue to sense the deceased person’s presence throughout their life.
- Researchers estimate that one-third of the worldwide population has had one or more ADCs (61).

ADCs provide *objective evidence* that the deceased person continues to exist after physical death.

12B. The case of Lucille’s biological grandfather

Lucille was a 39-year-old hotel housekeeper in Florida. She had been adopted after birth. Her birth name was Mary but her adoptive parents had changed it to Lucille.

“A man came to the foot of my bed one night. I was scared because I didn’t recognize him. He said, ‘Mary, your mother loves you. ... Your mother is looking for you. Start looking for her. Find your mother! I love you.’ I remember asking him who he was just before I couldn’t see him anymore. And he said, ‘You’ll find out.’ The next thing I knew, he was gone. I was still scared, yet I had tears of happiness. I was glad to know that my birth mother was looking for me. This gave me the incentive to find my biological mother. I was always dreaming about finding her, but I didn’t want to hurt my adoptive parents. Then I went to a club for adoptees, and I found my mother with just one phone call! She asked, ‘How did you find me?’ I told her an elderly man came to the foot of my bed. I described what he looked like, and she said, ‘That’s your grandfather!’ I learned when Grandpa was dying, he told my mother, ‘Find your daughter. Find your baby.’ He wanted to rest in peace knowing we would be together again. ... When we met [the next day], [my

mother] showed me a picture of my grandfather, and that was the man who had been standing at the foot of my bed. Grandpa had the same suit on in the photograph that he wore when he came to me. Then I knew my experience was real!" (22: 286–287).

In this case, Lucille sees an unknown deceased man who gives her a message about her birth mother, addressing her with her birth name. Lucille confirms that the person she saw was her deceased biological grandfather from the photograph of him her mother showed her. This case is similar to the NDEr seeing an unknown deceased man and later finding out he was his biological father (Section 10B-1). Lucille's perception of her deceased grandfather was accurate, that is, *veridical*. The information her father told her, that her mother was looking for her, was also veridical.

12C. The case of Blair's father

In another example, the deceased person can be seen by two or more people independently and their individual accounts corroborate each other.

Blair was a business executive, age 45. Her father had died from a series of strokes. She and her five-year-old son were together in a hotel room the night before the funeral. Blair was sitting in a chair and her son was in bed. As she was praying for her father:

"The lights in the room seemed to grow dim, and all of a sudden, there was my father! He seemed very, very solid. Though he was in his eighties when he died, now he appeared to be more like a man in his sixties. ... He stood there and told me, 'Be strong and take care of your mother. Remember, I love you. Good-bye.' Dad's facial expression softened considerably when he said, 'Remember, I love you.' It lasted only a few seconds, and then he left. My little boy, who was in bed, got up. I thought he had been asleep. He ran to me and said, 'My granddaddy! My granddaddy!' I said, 'Your granddaddy is gone.' And he said, 'No! My granddaddy was right here!' So my son saw him too!" (22: 329).

In this case, the agreement of two living people simultaneously witnessing the same ADC event provides *objective corroboration* of the event. To Blair, her father seemed "very, very solid" rather than ethereal and about 20 years younger. It is not unusual for the deceased person in an NDE, SDE or ADC to appear younger than they looked at the time of their death.

12D. The case of Eric Zimmerman

In another example, a deceased son was seen and touched by his father who was fully awake; there was an energetic interaction between father and son.

Twenty-five-year-old Eric Zimmerman was killed in an automobile accident and appeared to his father, Fred, forty-five days later. That morning, Fred had been up for half-an-hour and was stepping toward the bathroom.

"I felt a tremendous squeeze and hug on both sides of my body that stopped me in my tracks. Eric appeared right in front of my face, smiling, and the whole room was full of energy. It's like the molecules, atoms, and air are all moving at a tremendous speed. It was forceful, explosive, loving, highly energized—the most exhilarating experience that I have ever had! I hugged Eric. I was hugging an energy force, not a real physical body. I kissed him on his right cheek and felt his beard/whiskers on my lips. He was moving so fast ... as though he was flying through the house.

"My mind was ecstatic, lucid, fully awake and aware of what was happening. I could see the tremendous love in the complete environment that Eric brought with him. I knew this was real, on purpose, planned by Eric as I could never have written or wished the events in this spontaneous experience. The force field, aura, and energy surrounding Eric was so strong and charged that it pushed me back onto the bed. ... As I

had my arms around Eric, his image and I were falling toward the bed. He told me telepathically, ‘I love you Dad. I love you Mom.’ ... As we fell, he rolled over the top of me and I could see his whole body” (29: 152–153).

In this case, Fred was fully awake and lucid. The entire encounter lasted only about ten seconds. Eric’s presence was instantly evident through Eric’s face and the touch of his beard, through the power of his personality, through the wrestling with his dad onto the bed, and through his message to his parents, “I love you Dad. I love you Mom.” The entire atmosphere was suffused with his love for them.

Fred’s interaction with his son included an energetic force that was strong enough to hold Fred and to push him physically backwards onto the bed. Eric’s “body” was not material but an “energy force” that Fred could touch, kiss and hug. Fred could feel the whiskers on Eric’s face.

This ADC encounter provides additional evidence suggesting that the nonmaterial mind entity can exert a measurable force on physical matter (Section 6B-2).

12E. What do after-death communications mean?

ADCs provide strong evidence indicating not only the survival of death of the individual but also a *persistence* of that person’s personality, memory, and relationships with those still living. As with NDErs meeting deceased loved ones, ADCs indicate that the deceased person’s consciousness, personality, and identity *continue on after death*. Shared ADCs, that is, encounters in which two or more people witness the deceased person, provide *objective corroboration* of the event and cannot be attributed to imagination or wishful thinking.

13. Summary of the evidence from deceased persons

In Part 2 of this essay, in Sections 10–12, we presented the evidence of encounters with deceased loved ones and friends from NDEs and other death-related phenomena.

In Section 10, we presented evidence from encounters with a deceased person during an NDE who communicated accurate veridical information. The person may be a deceased person known to the NDEr but not known to have died (Section 10A) or a deceased person not known to the NDEr but later identified (Section 10B). Veridical communication with someone who has already died is *evidence implicitly for personal survival of physical death*. These cases are strong *objective* evidence of contact with those who have died and that *the minds of deceased persons continue after physical death* (Section 10C).

In Section 11, we described the phenomenon of shared death experiences (SDEs) in which a healthy, awake person observes the dying person’s spirit body separate from the physical body or may be drawn out-of-body with the deceased person’s spirit body and observe details of the dying process (Sections 11A–11C). Therefore, SDErs are *objective eyewitnesses* to the process of dying. The process of dying is identical to the process in an NDE, except that the dying person does not return to the physical body *but continues to exist after physical death*. Thus, SDEs are strong objective evidence that *the deceased person’s conscious Self survives physical death* (Section 11D).

In Section 12, we described the phenomenon of spontaneous after-death communications (ADCs) which is the experience of direct communication from a deceased family member or friend with a healthy, living person (Section 12A). The deceased person frequently appears completely solid, in their full form and the encounter seems more real than everyday reality (Sections 12C–12D). The encounter may include physical interactions, such as hugging between the witness and the deceased person (Section 12D). The deceased person may provide *veridical information* which is later verified to be accurate (Section 12B). Shared ADCs, that is, encounters in which two or more people together witness the deceased person provide *objective*

corroboration of the event (Section 12C). Therefore, *ADCs provide strong objective evidence that the deceased person continues to exist after physical death* (Section 12E).

Thus, in Part 2, we have presented strong, convincing evidence from encounters with dying or deceased persons in NDEs, SDEs, and ADCs, that the deceased person’s mind or consciousness continues to exist after physical death. The convergence of strong evidence from these experiences supports the fact—beyond a reasonable doubt—that ***the mind of a deceased person continues to exist after physical death***.

Part 3: Summary of key evidence and implications for the survival of physical death

14. Summary of the key evidence for survival of physical death

The focus of the evidence we have presented has been near-death experiences (NDEs), the experiences of human beings who have been close to death and *experienced the first stages of the dying process*. We then included the related experiences of those who have *witnessed the dying process* in shared death experiences (SDEs) and of those who have witnessed *communications from deceased loved ones* in after-death communications (ADCs). Thus, we have covered the full spectrum of human experience relating to the separation of the mind from the body, the process of dying, physical death, and survival after physical death.

Roughly 400 million people worldwide have experienced an NDE (Section 1A). Millions more people have experienced an SDE or an ADC. When the same experience is considered *collectively* across millions of people, it can be regarded as a *common, objective reality*.

The evidence that we presented in these phenomena is both (a) *veridical*, that is, based on credible accurate, verified observations or information, and (b) *objective*, that is, based on corroboration by credible independent witnesses. Therefore, the facts we have derived in our key lines of evidence are *credible, real, and objective*.

In addition, we included sections to address skeptical arguments or alternative explanations for these phenomena (a) to present a plausible model and mechanism that explains how these phenomena can occur, and (b) to show how various philosophical counterarguments and alternative explanations fail.

All this evidence must be considered as a whole. Together, it forms a *complete coherent picture*.

14A. The ten key lines of evidence

1. **A person's mind or consciousness can separate from and operate independent of the physical body.** We presented strong evidence (Section 2) that in many NDEs, the NDEr reports accurate, verified perceptions of the physical realm beyond the reach of the physical senses or while the brain was incapacitated, demonstrating that the NDEr's mind or consciousness has somehow *separated* from and *operates independent* of the body.
2. **The separate mind embodies all of the person's cognitive functions; it is the *essence* of the person.** We presented strong evidence (Section 3) that the NDEr's mind acts as a *cohesive unit*, embodying all cognitive faculties, and carrying *the essence of the person*. The NDEr realizes that their physical body is *not their real self*.
3. **The separate mind itself is an *objectively real thing, a real being*.** We presented strong evidence (Section 4) that the mind entity itself is *objectively real*—the mind entity can be seen by other people, by animals, and by other NDErs. *The separate mind entity objectively exists*.
4. **The *mind entity hypothesis* is a plausible picture of the human being.** We presented the mind entity hypothesis (Section 5). We proposed that the human being consists of a nonmaterial "mind" integrated with the physical body. The mind ordinarily interacts and works with the brain to support consciousness, but can separate from and function independent of the brain. The mind entity hypothesis is *plausible* given the evidence in the previous items 1–3.
5. **There is a *plausible mechanism* for two-way causal interactions between the nonmaterial mind and the brain.** We proposed a mechanism (Section 6) for causal interactions between the mind and the brain based on (a) NDEr reports of an interactive force of resistance when the NDEr moves through

solid matter, and (b) NDEr reports of interactions with another person's physical body that appear to enable both the *sensing and triggering of neural activity*.

6. **The mind entity theory addresses the *main philosophical objections to dualism*.** In the mind entity theory (Section 7), the mind merges with the physical brain and exerts direct causal interaction with it at specific points of contact, thus addressing the "causal pairing problem" and the "causal closure of the physical."
7. **Various psychological and physiological explanations for NDEs fail.** Unlike the mind entity theory, various alternative explanations fail (Section 8) because they do not give a *comprehensive* explanation of *all* aspects of *all* NDEs. Some explanations apply *ad hoc* hypotheses to address specific aspects of specific cases but fail when applied as a *general coherent explanation* of NDEs. In addition, many NDEs occur in *non-life-threatening* circumstances, in healthy individuals, indicating that there must be *some unifying factor*, that is, some *immediate cause* that applies in *all* NDEs, rather than a specific psychological or physiological precipitating factor. We proposed the common immediate cause of NDEs is *in fact* the separation of the mind entity from the physical body.
8. **Encounters with deceased persons during an NDE indicate that the mind of the deceased person continues after physical death.** In these cases, the deceased person communicated *accurate veridical information* that the NDEr could not have obtained by any other means (Section 10), which provides strong evidence that the encounters were real encounters with real human beings who once lived on Earth. Veridical communications with someone who has already died is *evidence implicitly for personal survival of physical death*.
9. **Shared death experiences (SDEs) are strong objective evidence that the deceased person's conscious Self continues to exist after physical death.** In some SDE cases, the experiencer (SDEr) witnesses the process the dying person goes through in making the transition out-of-body (Section 11), which has elements similar to NDEs. The SDEr can later *verify* the details seen in the dying person's life review. Two or more SDErs in attendance at the person's death may observe and *corroborate* the same SDE events, so the events are *objective facts*. The SDEr observes that the process of dying is identical to the process in an NDE, except that the dying person's mind does not return to the physical body *but continues to exist after physical death* in a different realm.
10. **After-death communications (ADCs) also provide strong objective evidence that the deceased person continues to exist after physical death.** In ADCs, a deceased loved one communicates with the "witness" (Section 12) who may sense the presence of and hear the loved one, or directly see and converse with them. The loved one frequently appears completely solid, in their full form, and the encounter seems more real than everyday reality, including in some cases physical interactions. The loved one may provide *veridical information* which is later confirmed to be accurate. Shared ADCs, that is, encounters in which two or more people together witness the loved one, provide *objective corroboration* of the event. Thus, ADCs provide strong *objective evidence* that the deceased person continues to exist after physical death.

14B. Summary and conclusion

The evidence from near-death experiences (NDEs) demonstrates that the essential, nonmaterial aspect of a human being (the person's *mind entity*) *separates from the physical body* in an NDE and operates independent of the brain and physical body (Sections 2–8, summarized in Section 9).

The evidence from shared death experiences (SDEs) demonstrates that in the process of physical death, as witnessed by SDErs (Section 10), the dying person’s mind entity separates from the physical body and *transitions to a different realm*.

The evidence of meeting deceased persons in NDEs, SDEs, and in after-death communications (ADCs) (Sections 10–12, summarized in Section 13) demonstrates that the deceased persons are *objectively real* because they are observed at times simultaneously by multiple witnesses and at times provide veridical information previously unknown to the witness. Credible veridical communication with someone who has already died is *evidence implicitly for personal survival of physical death*.

Conclusion: Based on the evidence from these phenomena, taken as a whole, a person’s essential Self or mind at death *separates* from the physical body, *transitions* to a different realm, and *survives* the death of the physical body.

14C. Further considerations give further weight

The credibility of any theory or explanation of the survival of consciousness after physical death must include a presentation of how the theory fits in with other areas of science, philosophy, and human knowledge. How powerful is the theory in explaining other problems or conundrums in science and philosophy? What are the implications of the theory for other areas of science and for the whole of humanity?

15. Explanatory power provides further confirmation

A central tenet of the mind entity theory is that the essence of the human being is an *autonomous nonmaterial conscious entity, a spiritual being, united with a physical body*. This tenet is a radical departure from explanations of consciousness proposed by materialist scientists and philosophers—who are stuck on the “hard problem” of explaining subjective phenomenal experience. This tenet is also at odds with explanations of consciousness proposed by NDE theorists—as some form of “nonlocal,” “infinite,” or “cosmic” consciousness where the self loses its individual identity.

Nearly all scientists and philosophers have dismissed interactionist dualism *out of hand* because, they conclude, it is literally impossible to explain *how nonmaterial entities can causally interact with the physical world*.

We believe our mind entity theory answers these challenges with a plausible explanation and specific neurological mechanisms. We are confident that this theory can successfully be tested and confirmed and can provide more comprehensive and coherent neurological explanations of conscious experience than current neuroscience can do.

15A. Explaining enigmas of philosophy and neuroscience

The mind entity theory, based on the existence of a nonmaterial conscious entity united with the brain, explains a number of problems in philosophy and neuroscience (see also 35: 141–143):

1. **The hard problem of consciousness.** How does neural activity in brain neurons turn into subjective phenomenal experience, for example, the vivid experience of the color red? In our view, the mind is the *seat* of consciousness, the *seat* of subjective experience. The mind *is the subject* in which phenomenal experience occurs. When one is in-body, all conscious experience occurs via brain electrical activity, that is, through the interaction of neural activity with the mind. Because human beings *are* conscious entities, sufficient neural activity in the brain naturally comes to awareness as subjective experience. There is no “hard problem” of consciousness because conscious awareness is the *inherent property* of minds.

2. **The problem of *encoding semantic memory*.** Semantic memories—of facts, word meanings, faces, etc.—are evidently “encoded” throughout the cortex. How do neural circuits across the cortex provide a mechanism for encoding and recalling semantic memories? In our view, when we learn a new word, the semantic memory is formed *in the mind*. When we read the word again, its meaning is recalled *from the mind* and activates a specific pattern of neural activity to bring the word’s *concept* to awareness. There is no semantic encoding in the neurons.
3. **The problems of *agency and free will*.** How does one have the sense of self-awareness and know that one is the agent of one’s own actions, feelings, and thoughts? Are our choices completely determined or are we free to choose among different courses of action? In our view, the sense of agency *is* one’s sense of being an autonomous mind entity. When I decide to move, my thought activates neural activity in my brain. I become aware of my decision and my body moves. As a self-aware mind entity, I know that I am the agent of my actions, feelings, and thoughts. I can choose freely and my intentions are fulfilled. Free will exists; I can’t always control the circumstances of my life but I *can* control *how I respond* to those circumstances.
4. **The problem of *inhalational anesthetics*.** How do biochemically inert anesthetics, like ether, work to suppress conscious awareness? In our proposed mechanism for mind-to-brain interaction (Section 6C-2), the mind alters neural “ion channels” to trigger electrical activity which enables one’s mental content to come to awareness. The presence of substances like ether in the brain temporarily blocks these ion channels so that the mind can no longer trigger electrical activity. One’s normal brain activity is suppressed and mental content can’t come to awareness.

15B. *Further confirmation of the mind entity theory*

We believe that the mind entity theory addresses *all* aspects of *all* NDEs, as well as provides the basis for understanding the operation of ordinary consciousness in the physical brain and body. The theory’s ability to explain a number of problems in areas of philosophy and science is *further confirmation of its validity*.

16. Paradigm shifts

The mind entity theory presents several significant shifts to existing scientific frameworks or *paradigms*, most notably in neuroscience and physics.

With competitive scientific paradigms, one needs to compare the theories against the existing phenomenological facts, including anomalous phenomena like NDEs. Which theory fits the facts *better*? In this case, does the mind entity theory fit the facts of NDE phenomena better than, say, neuroscientific explanations (Section 8)? Does the mind entity theory provide a better explanation for subjective phenomenal experience than philosophy and neuroscience (Section 15A)?

Furthermore, a paradigm shift requires a *change of conceptual framework*. The mind entity theory deals with the mind inducing and “detecting” brain neural activity via neural apical dendrites (Section 6C), whereas neuroscience deals with neural processes performing “calculations” on neural representations of mental content.

By definition, the competing old and new paradigms are *incommensurable*, that is, they cannot be measured by each other’s standards. The entire *conceptual web* of the old paradigm must be *shifted* or *reformulated* in terms of the new paradigm and then “laid down again on nature whole” (28: 149).

This means that the new paradigm must explain (ultimately all of) the existing facts of the field in its own terms. Thus, the mind entity theory requires a significant *framework or Gestalt shift*, in both neuroscience and physics.

16A. Implications for neuroscience

To adopt the new paradigm of the nonmaterial self-conscious mind, current neuroscience must be reformulated and extended, for example, in the following ways:

- **Neural activations** are currently considered *calculations* on neural *representations* of mental content *encoded* in neural structures.

In contrast, in our theory, all mental processing occurs in the nonmaterial mind. There are no neural representations of mental content. The mental content in the mind is impressed on a brain region; the neural activations in that region bring the content to awareness. The reciprocal interplay of the mind with the brain produces in-body consciousness.

- **Both episodic and semantic memories** are currently considered to be *encoded* as neural *representations* in the brain, in the hippocampus or globally in the cortex, respectively.

In contrast, in our theory, all memories are formed and “stored” in the mind and are *accessible* by impressing specific remembered content, through intuition, on the appropriate brain region, for example, a specific life event or the meaning of a word. The reciprocal interplay of the mind with the brain brings the memory to consciousness.

- **The “mind”** is currently considered to be a set of cognitive and emotional capacities produced by brain activity. The mind is impaired when the brain is impaired. With severe brain damage, the mind is reduced to primitive “unresponsive wakefulness” or “vegetative” states. The mind—the person—is *annihilated* with the death of the brain.

In contrast, in our theory, the nonmaterial self-conscious mind is ordinarily dependent on brain activity and is impaired when the brain is impaired. With severe brain damage, *the mind is still whole* but is locked in a severely dysfunctional brain. Therapies can be developed to improve brain function so the mind can begin to work with the brain again and the patient can become more responsive. With the death of the brain, the mind—the essence of the person—is released from the body and continues to exist as the whole person.

16B. Implications for physics

To adopt the new paradigm of the nonmaterial self-conscious mind, current physics must be reformulated and *extended* to account for the following new phenomenological facts:

- **An extra spatial dimension:** As described above, NDErs frequently report unusual visual abilities—“360° spherical vision” and “vision from everywhere” (Section 3C-2). Several NDE researchers have proposed that this exceptional ability suggests there is an *additional spatial dimension* (1; 7; 24; 25). Because NDEr veridical perceptions occur “simultaneously in all directions,” the *5th dimension* must encompass the other dimensions (three of space and one of time). The nature of this 5th dimension has relevance to physicists who are considering an extra spatial dimension to explain the weakness of gravity relative to the other fundamental forces (51).
- **A new physical force** between the out-of-body nonmaterial mind entity and solid physical objects: This force accounts for the subtle interaction NDErs experience when moving through solid matter, generally described as a resistance or increase in density. This force is likely a universal force between out-of-body entities existing in the 5th dimension and matter, for example, accounting for the rare cases of physical interaction between a deceased loved one and an in-body person (Section 12D). This new force may also be involved in apparent cases of *psychokinesis (PK)*, the paranormal ability to influence a physical system without using ordinary physical interaction (50; 55: Case 9.3).

- **A new type of entity (spiritual beings):** The evidence from NDEs strongly suggest that the NDEr's nonmaterial mind or consciousness *separates* from and *operates independent* of the body; that the mind is *the essence of the person*; and that the mind entity is *objectively real* (Sections 2–4). The evidence of meeting deceased persons in NDEs, in shared death experiences (SDEs), and in after-death communications (ADCs) (Sections 10–12) demonstrates that the deceased persons these experiencers encounter are *objectively real*. The phenomenological facts indicate that the minds of living and deceased persons are *nonmaterial spiritual beings* who continue to exist after the death of the physical body. Therefore, a complete scientific description of physical reality needs to include the existence of these entities because every living human being is the embodiment of a spiritual being in a physical body.

16C. Extending the existing physicalist paradigm

The insights derived from NDEs, SDEs, and related phenomena lead to a theory of mind that has greater explanatory power with respect to consciousness, memory, and agency. As we have hopefully demonstrated above, the insights from this theory provide a new conceptual framework that can lead to paradigm shifts in neuroscience, physics, and other fields, thereby *extending* the current naturalism to include *nonmaterial* entities, forces, and interactions.

16D. The survival of physical death: There is no death

The most important paradigm shift will be for all of humanity to accept that the human being is a *spiritual being* clothed in a physical body. There is no need to fear death because *our essential being does not die with the death of the physical body. There is no death.*

When people lose the fear of death, their whole perspective changes. Nearly all NDErs report a strong decrease or complete loss of the fear of death as the result of their NDEs. Shared death experiencers and ADC witnesses also experience this aftereffect.

And NDErs experience a whole set of other lasting changes in their lives. They experience an inner peace and greater appreciation for life; for them, life has meaning and purpose. NDErs are less judgmental and more loving than before their NDE; they are less materialistic and more altruistic, with an increased concern for others; they are less competitive and more cooperative, and they are less self-centered, more compassionate and more understanding of others than before their NDE (54: 124–127).

You don't need to have an NDE in order to make these changes yourself, inwardly. NDE researcher Ken Ring has found that merely hearing and learning about NDEs can bring about profound personal changes similar to what NDErs report (54: 200–215). For example, Donald, a retired professor, wrote to Ring that studying NDEs brought about a major life change:

“I have found myself identifying so closely with these [NDErs] that I have been experiencing vicariously much of what they experienced in fact. ... A noticeably reduced fear of death, and with it, the attendant disappearance of all fear of living. ... Prior to my research, I characterized myself as a rip snortin' atheist. ... Now, ... I am firmly convinced that human consciousness survives bodily death.”

Another student of NDE literature, James, told Ring:

“NDEs have greatly reduced any fear of death I had. In fact, they've eliminated it. I have a very positive view of death, and the beginning of a much clearer picture of life after death. ... NDEs have greatly enhanced my awareness of the primacy of love as a Living Force, and as the meaning and goal of all of our actions and of all things.”

The [near-death] experience represents the very essence, the very expression of the fabric of being. It is the ultimate of all spiritual experiences, with the only known exceptions being death itself and its complement, birth. The numerous stories from experiencers have provided humanity with a wide variety of richness in spiritual experience. Over the ages, these tales have provided the world with the very core of spirituality, religion, and esoteric teachings. For the person who has had such an experience, it is not 'near-death.' It is a real death, both physically and psychologically. It is a transformation in that it changes one's life forever. It is time to get these stories out to the public. Humanity is in need.

—Near-death experiencer Jerry Casebolt (10: 64).

References

1. Arnette, J. K. (1992). On the mind/body problem: The theory of essence. *Journal of Near-Death Studies*, 11(1), 5–18.
2. Arnette, J. K. (1995). The theory of essence. II. An electromagnetic-quantum mechanical model of interactionism. *Journal of Near-Death Studies*, 14(2), 77–99.
3. Arnette, J. K. (1999). The theory of essence. III: Neuroanatomical and neurophysiological aspects of interactionism. *Journal of Near-Death Studies*, 18(2), 73–101.
4. Atwater, P. M. H. (2019). *The forever angels: Near-death experiences in childhood and their lifelong impact*. Bear & Company.
5. Belanti, J., Perera, M., & Jagadheesan, K. (2008). Phenomenology of near-death experiences: A cross-cultural perspective. *Transcultural psychiatry*, 45(1), 121–133.
6. Bellg, L. (2015). *Near death in the ICU: Stories from patients near death and why we should listen to them*. Sloan Press.
7. Brumblay, R. J. (2003). Hyperdimensional perspectives in out-of-body and near-death experiences. *Journal of Near-Death Studies*, 21(4), 201–221.
8. Charland-Verville, V., Jourdan, J.-P., Thonnard, M., Ledoux, D., Donneau, A.-F., Quertemont, E., & Laureys, S. (2014). Near-death experiences in non-life-threatening events and coma of different etiologies. *Frontiers in Human Neuroscience*, 8, 203.
9. Cook, E. W., Greyson, B., & Stevenson, I. (1998). Do any near-death experiences provide evidence for the survival of human personality after death? Relevant features and illustrative case reports. *Journal of Scientific Exploration*, 12(3), 377–406.
10. Corcoran, D. K. (Ed.) (1996). *When ego dies: A compilation of near-death and mystical conversion experiences*. Emerald Ink.
11. DentalMastermindGroup. (2011, July 27). Famous cardiac surgeon's stories of near death experiences in surgery. Retrieved from <https://youtu.be/JL1oDuvQR08>
12. Eulitt, M., & Hoyer, S. (2001). *Fireweaver: The story of a life, a near-death, and beyond*. Xlibris.
13. Fischer, J. M. (2020). *Death, immortality, and meaning in life*. Oxford University Press.
14. Fischer, J. M., & Mitchell-Yellin, B. (2016). *Near-death experiences: Understanding visions of the afterlife*. Oxford University Press.
15. Gallup Jr, G. (1982). with William Proctor. *Adventures in immortality: A look beyond the threshold of death*. McGraw-Hill.
16. Gibson, A. S. (1999). *Fingerprints of God: Evidences from near-death studies, scientific research on creation, and Mormon theology*. Horizon Publishers.
17. Greyson, B. (1983). The near-death experience scale. *Journal of Nervous and Mental Disease*, 171(6), 369–375.
18. Greyson, B. (2007). Consistency of near-death experience accounts over two decades: Are reports embellished over time?. *Resuscitation*, 73(3), 407–411.

19. Greyson, B. (2010). Seeing dead people not known to have died: “Peak in Darien” experiences. *Anthropology and Humanism, 35*(2), 159-171.
20. Greyson, B. (2021). *After: A doctor explores what near-death experiences reveal about life and beyond*. St. Martin’s Essentials.
21. Greyson, B., Kelly, E. W. & Kelly, E. F. (2009). Explanatory models for near-death experiences. In J. M. Holden, B. Greyson & D. James (Eds.), *The handbook of near-death experiences: Thirty years of investigation* (pp. 213–234). Praeger/ABC-CLIO.
22. Guggenheim, B., & Guggenheim, J. (1997). *Hello from Heaven!: A new field of research, after-death communication, confirms that life and love are eternal*. Bantam.
23. IANDS. (2002, May 15). Archive through May 22, 2002 (anonymous). Retrieved from <https://iands.org/ndes/nde-stories/iands-nde-accounts/632.html>
24. Jourdan, J.-P. (2001). Les dimensions de la conscience. *Les Cahiers scientifique de IANDS-France, 7*. Retrieved from [http://dr.jp.jourdan.pagesperso-orange.fr/Les Dimensions de la Conscience.pdf](http://dr.jp.jourdan.pagesperso-orange.fr/Les%20Dimensions%20de%20la%20Conscience.pdf)
25. Jourdan, J.-P., & Smythies, J. (2019). An exploratory study of perceptual and cognitive features in near-death experiences: A proposed model and research recommendations. *Journal of Near-Death Studies, 37*(2), 65–97.
26. Kim, J. (2011). *Philosophy of mind* (3rd ed.). Westview Press.
27. Knoblauch, H., Schmied, I., & Schnettler, B. (2001). Different kinds of near-death experience: A report on a survey of near-death experiences in Germany. *Journal of Near-Death Studies, 20*(1), 15–29.
28. Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd enl. ed.). University of Chicago Press.
29. LaGrand, L. E. (1999). *Messages and miracles: Extraordinary experiences of the bereaved*. Llewellyn Publications.
30. Lange, R., Greyson, B., & Houran, J. (2004). A Rasch scaling validation of a ‘core’ near-death experience. *British Journal of Psychology, 95*(2), 161–177.
31. Leth, K. (2020). *A child goes to heaven* (2nd ed.). Mishaelbooks.com.
32. Libet, B. (2004). *Mind time: The temporal factor in consciousness*. Harvard University Press.
33. Martial, C., Simon, J., Puttaert, N., Gosseries, O., Charland-Verville, V., Nyssen, A.-S., Greyson, B., Laureys, S., & Cassol, H. (2020). The Near-Death Experience Content (NDE-C) scale: Development and psychometric validation [Supplementary Material B]. *Consciousness and Cognition, 86*, 103049.
34. Mays, R. G., & Mays, S. B. (2008). The phenomenology of the self-conscious mind. *Journal of Near-Death Studies, 27*(1), 5–45.
35. Mays, R. G., & Mays, S. B. (2015). Explaining near-death experiences: Physical or non-physical causation?. *Journal of Near-Death Studies, 33*(3), 125–149.
36. Mays, R. G., & Mays, S. B. (2017). Near-death experiences: A critique of the Fischer and Mitchell-Yellin physicalist interpretation. *Journal of Near-Death Studies, 36*(2), 69–99.
37. Mays, R. G., & Mays, S. B. (2020). Near-death experiences: Extended naturalism or promissory physicalism? A response to Fischer’s article. *Journal of Consciousness Studies, 27*(11–12), 222–236.
38. McKenzie, E. (2015). *Dying to fit in*. Amazon CreateSpace.

39. McMoneagle, J. W. (1997). *Mind trek: Exploring consciousness, time, and space through remote viewing*. Hampton Roads Publishing.
40. Moody, Jr., R. A. (1975). *Life after life*. Mockingbird Books.
41. Moody, Jr., R. A., with Perry, P. (1988). *The light beyond*. Bantam Books.
42. Moody, Jr., R. A., with Perry, P. (2010). *Glimpses of eternity: Sharing a loved one's passage from this life to the next*. Guideposts.
43. Moore, L. E., & Greyson, B. (2017). Characteristics of memories for near-death experiences. *Consciousness and Cognition*, 51, 116–124.
44. Musgrave, C. (1997). The near-death experience: A study of spiritual transformation. *Journal Near-Death Studies*, 15(3), 187–201.
45. NDEAccounts. (n.d.). Al Sullivan's—NDE—Confirmation of out of body experience. Retrieved from <https://youtu.be/u-91QXXsyEc>
46. Neal, M. C. (2012). *To heaven and back: A doctor's extraordinary account of her death, heaven, angels, and life again: A true story*. Waterbrook Press.
47. Palmieri, A., Calvo, V., Kleinbub, J. R., Meconi, F., Marangoni, M., Barilaro, P., ... & Sessa, P. (2014). "Reality" of near-death-experience memories: Evidence from a psychodynamic and electrophysiological integrated study. *Frontiers in Human Neuroscience*, 8(429), 1–16.
48. Passion Harvest. (2021, January 9). *Shared death experience: Transition, life review, afterlife reunion, & bilocation w/ Dr Scott Taylor* [Video]. YouTube. <https://youtu.be/DXVtrtWBD9I&t=466s>
49. Perera, M., Padmasekara, G., & Belanti, J. (2005). Prevalence of near-death experiences in Australia. *Journal of Near-Death Studies*, 24(2), 109–116.
50. Radin, D., Michel, L., Johnston, J., & Delorme, A. (2013). Psychophysical interactions with a double-slit interference pattern. *Physics essays*, 26(4), 553-566.
51. Randall, L. (2006). *Warped passages: Unravelling the universe's hidden dimensions*. HarperCollins.
52. Ring, K. (1980). *Life at death: A scientific investigation of the near-death experience*. Coward, McCann & Geoghegan.
53. Ring, K., & Cooper, S. (1999). *Mindsight: Near-death and out-of-body experiences in the blind*. William James Center for Consciousness Studies.
54. Ring, K., & Elsaesser-Valarino, E. (1998). *Lessons from the Light: What we can learn from the near-death experience*. Moment Point Press.
55. Rivas, T., Dirven, A., & Smit, R. H. (2016). *The self does not die: Verified paranormal phenomena from near-death experiences*. International Association for Near-Death Studies.
56. Rommer, B. R. (2000). *Blessing in disguise: Another side of the near-death experience*. Llewellyn.
57. Ryle, G. (1949/2009). *The concept of mind*. Routledge.
58. Smith, S. L., Smith, I. T., Branco, T., & Häusser, M. (2013). Dendritic spikes enhance stimulus selectivity in cortical neurons *in vivo*. *Nature*, 503, 115–120.
59. Steiger, B., & Steiger, S. H. (1995). *Children of the Light: The startling and inspiring truth about children's near-death experiences and how they illuminate the beyond*. Signet–Penguin.

60. Stevenson, I., & Greyson, B. (1979). Near-death experiences: Relevance to the question of survival after death. *Jama*, 242(3), 265–267.
61. Streit-Horn, J. (2011). *A systematic review of research on after-death communication (ADC)*. University of North Texas.
62. Sutherland, C. (1990). Changes in religious beliefs, attitudes, and practices following near-death experiences: An Australian study. *Journal of Near-Death Studies*, 9(1), 21–31.
63. Thonnard, M., Charland-Verville, V., Brédart, S., Dehon, H., Ledoux, D., Laureys, S., & Vanhaudenhuyse, A. (2013). Characteristics of near-death experiences memories as compared to real and imagined events memories. *PLoS ONE*, 8(3): e57620.
64. van Lommel, P. (2010). *Consciousness beyond life: The science of near-death experience*. HarperOne.