What is the Best Available Evidence for the Survival of Human Consciousness after Permanent Bodily Death?

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Introduction

On Christmas Day, 2011, Ben Breedlove passed away at his home in Austin, Texas, from complications of hypertrophic cardiomyopathy (HCM), at the age of just 18. Diagnosed with HCM at 12 months of age – a condition in which the heart muscle is abnormally thick, making it more difficult for it to pump blood – Ben had already cheated death on a number of occasions throughout his life. Less than three weeks earlier, paramedics had rushed to his school and used a defibrillator to revive him after he had collapsed while walking between classes. But on Christmas Day, there would be no return from death.

Remarkably, though he lived his life in the shadow of the constant threat of sudden death, a week before his passing Ben made clear to his family that he was no longer afraid of it. At a family gathering the day after yet another cardiac event, Ben – a committed Christian – said a prayer for those closest to him: "I pray that my family wouldn't be sad or scared for me anymore, because I'm not sad or scared. I pray they would have the same peace that I have."[i]

Ben's lack of fear was the result of a strange experience he had while the paramedics were working on him after he had collapsed at school. After he passed out, Ben realized he could still see and hear what was going on, and just as the paramedics were preparing to use the defibrillator on him, he suddenly 'awoke' in a white room with no walls, "a brighter white than he could ever describe that seemed to engulf his surroundings in every direction." In this never-ending whiteness, Ben "listened to the most quiet he had ever heard in his life." He found himself in front of a full-length mirror, and as he stared into it, realized he wasn't just looking at his reflection, but was…

> *…looking at his entire life. In a sense of time that Ben could never explain, he stood in front of that mirror and watched his entire life, every moment he had ever experienced, play out in front of him in real time. Yet somehow it went by in an instant. In that incomprehensible moment, Ben felt proud of himself, of his entire life, of everything he had done.*[ii]

Ben was asked, "Are you ready?", to which Ben – assuming he was going to heaven – replied "Yeah." After hearing the words "Go now!", Ben woke to find himself back at his school, being resuscitated by the paramedics.

Ben had undergone what is known as a 'near-death experience' (NDE). This strange phenomenon, recorded countless times throughout history and in different cultures around the world, occurs when a person has a brush with death and undergoes an experience that appears to give them a glimpse of an afterlife realm.

Ben's sister Ally recounts that after this NDE, "it was clear that Ben had a new resolve… in some ways, he had crossed over already; he had seen the other side and formed his opinions about it; he accepted it…he was content with that possibility, almost happy about it."

When Ben's father asked him to talk about the peace he felt during his NDE, Ben described it in terms of Philippians 4:8: "It's just like the verse says ('And the peace that surpasses all understanding shall guard your hearts and minds in Christ Jesus'). You can't describe it. You just have to be there."[iii]

Ally recalls that, following the NDE, in a quiet moment together Ben told her, "I think that God let me have that vision so I wouldn't be afraid of dying."[iv] He passed away a week later.

What if we could all experience that surety, the peace of knowing that something lies beyond the door of death? How would society be different, if we knew that death wasn't the end for our loved ones when tragedy took them from us? Our entire approach to death would be forever changed: how we treat the dying (medically and socially), our grief at losing loved ones, and our anxiety over our own mortality.

As it turns out, there *is* enough evidence for us all to accept this as reality: indeed, as we will see, the survival of consciousness beyond physical death seems the most likely conclusion when we carefully examine the masses of evidence and testimony collected over time from four areas of research:

- Experiences had during brushes with death: near-death experiences
- Experiences had at the time of death: end-of-life experiences
- Experiences involving those beyond death: communication through mediums
- Experiences of returning from death: memories of past lives reported by children.

In fact, the evidence from these areas is so strong that the only thing truly stopping us from accepting it is modern science's blind insistence that it is an impossibility. However, once we grasp that human understanding of the cosmos and our existence has constantly been updated

through the ages as our knowledge and experience has expanded with new evidence, it is less difficult to take the next step to accepting survival of consciousness as the most logical explanation for the data that we will present.

On paradigms

The people of every time have tended to regard their science as the apotheosis of all knowledge, but time and again history has proven that not to be the case. In ancient times, we had the very sensible, to the eye of the observer, Ptolemaic system of astronomy which described the strange motions of the planets that revolved around the obvious center of the cosmos – Earth – only for it to be replaced by the heliocentric model of Copernicus. In the late 19th century, many scientists believed that the field of physics was almost complete: "The more important fundamental laws and facts of physical science have all been discovered," experimental physicist Albert A. Michelson announced in a speech in 1894, "and these are now so firmly established that the possibility of their ever being supplanted in consequence of new discoveries is exceedingly remote." A little more than a decade later, both quantum physics and relativity had completely upturned our models of how the cosmos works.

In his seminal book *The Structure of Scientific Revolutions,* physicist Thomas Kuhn described these always incomplete and erroneous to some degree scientific frameworks that we live and work within at a certain time as *paradigms*, and the change from an outdated paradigm to a new one he named a *paradigm shift*. Within a paradigm, a certain model of 'what reality is' exists and dominates – and is somewhat self-supporting, as those embedded within the paradigm often believe that model to be the only possible 'reality', and thus reject alternative models and anomalies that don't agree with that model. Over time, however, those anomalies accumulate, until a scientific revolution occurs that upends the previous model and supplants it with a new one.

In this essay, we will present a large set of anomalies that challenge the current scientific paradigm – in which physical matter is 'reality', consciousness is just a by-product of the brain, and we do not survive death – and suggest a new one.

The reason most people are not familiar with this mass of extremely convincing evidence is, as Kuhn noted, because 'normal science' is "predicated on the assumption that the scientific community knows what the world is like," and it thus "often suppresses fundamental

novelties" because they are subversive.[v] So, in reviewing this evidence for the survival of consciousness beyond death, one of the highest hurdles that must be cleared is the bias of modern science's negative opinion on the possibility. And one of the tactics used in suppressing the evidence, by skeptics invested in defending the current paradigm, is to only accept evidence from multiple replications of lab studies by scientists using 'blind protocols' (and, truthfully, even then they probably still wouldn't accept it). However, this is not generally how science actually works when it comes to spontaneous, anomalous phenomena. In these areas, often it is eyewitness testimony that provides the most convincing and useful evidence.

A quick digression to examine two historical cases of paradigms being challenged will show how scientists can disregard a mass of convincing evidence – most of it being eyewitness testimony – simply because it doesn't agree with their model of reality.

Stones from the sky

While no reasonable person in the 21st century would dispute that stones from space do indeed enter Earth's atmosphere and sometimes even strike the ground, it is quite astonishing to remember that the extraterrestrial origin of meteors has only been an accepted fact in Western science for less than two centuries. Indeed, when Yale chemistry professor Benjamin Silliman proposed that an object that exploded over the town of Weston in 1807 might have been from space, Thomas Jefferson is famously claimed to have retorted "I would more easily believe that [a] Yankee professor would lie than that stones would fall from heaven." While the exact quote may be apocryphal, what is certain is that Jefferson was quite vocal in his skepticism about the provenance of the Weston meteorite – in one letter, he wrote "is it easier to explain how it got into the clouds from whence it is supposed to have fallen?"[vi] At the time, while sightings of fireballs streaking across the sky were common enough that they were accepted by science as occurring, they were believed to be a still-mysterious atmospheric phenomenon similar to lightning, unconnected to the implausible tales of rocks falling from the sky.

Are there lessons we can learn from how meteorites became a scientific fact and apply it to investigations of phenomena suggestive of the survival of consciousness beyond death? One key element to recognize is that it was the collective weight of clear and honest testimony – and not triple blind studies in a laboratory – that helped to (eventually) persuade scientists

that the phenomenon was real. Contrary to the widely used modern science aphorism "the plural of anecdote is not data," it was in fact the collective testimony of those who experienced this phenomenon first-hand which provided the data for science to eventually accept it. (It's worth noting that the aphorism mentioned actually started its life as "the plural of anecdote *is* data" – when "collected in a systematic manner according to a well-defined protocol"[vii] – before its meaning was flipped by others and became much-quoted by skeptics.)

For example, in 1795 a stone three feet across plummeted from the sky in the United Kingdom, plunging into the earth not far from Wold Cottage, the home of magistrate Major Edward Topham, a well-known public figure. Topham gave an account of this 'impossible' incident in *British Mineralogy*, in which he noted that the impact of the meteorite was witnessed by multiple people who were standing within 150 yards of where it hit the ground. Furthermore, before it hit the ground the fireball was also seen by "numbers of persons…and two sons of the clergy man of Wold Newton." Indeed, Topham wrote…

> *…no circumstance of the kind had ever more concurrent testimonies; and the appearance of the stone itself, while it resembles in composition those which are supposed to have fallen in various other parts of the world, has no counterpart or resemblance in the natural stones of the country.*[viii]

Topham was acutely aware of the controversial nature of such incidents, and thus "as a magistrate, I took [the witnesses] accounts upon oath," noting that he would have no truck with those who disbelieved the event had occurred as he had stated. "I mean not to enter into any literary warfare with those sceptics, who think it much easier to doubt every word of this account than to believe such an event could take place," he remarked. "There is no shorter way of disposing of anything than to deny or disbelieve it."

Then, in 1803 in the French village of L'Aigle, eyewitnesses told how the area had been pelted by thousands of rocks from the sky after a brilliant fireball had exploded in three massive detonations. Upon hearing of the event, the French Academy of Sciences dispatched a young scientist by the name of Jean-Baptiste Biot to investigate. His meticulous investigation of "without a doubt the most astonishing phenomenon ever observed by man" included interviews with eyewitnesses, a mapping of the debris field, and comparisons of the rocks to the local mineralogy. It was enough to be a turning point in the debate over the origin of falling rocks, and subsequent meteorite falls only helped to reinforce the veracity of eye-witness testimony that stones did indeed fall from the sky.

After the L'Aigle meteorite fall, the historian Eusebius Salverte criticized the way in which scientists had willingly refused to give credence to a conclusion that had been long been accepted by people of previous ages:

> *The ancient historians all make frequent mention of the productions of stones [fallen from the atmosphere]. No doubt was maintained respecting them in the Middle Ages; but the difficulty of accounting for them induced us not only to suspend our belief until called forth by more regular observation, which was very prudent, but also, which was less reasonable, to carry with us in this research* ***a predetermination to see nothing, or to deny what we had seen*** *[emphasis added].*[ix]

To put it another way, Salverte was saying that before the 'Age of Science', nobody doubted that rocks did indeed fall from the sky. It was only once the ruling scientific paradigm decided that this was an impossibility that scientists felt they needed to deny the testimony of eyewitnesses. We see here a parallel in acceptance of the survival of consciousness in all times up until the modern scientific age, when we have now been told it is an impossibility – despite abundant testimony from first-hand experiences to the contrary.

It says something about the resistance of scientists to anomalistic eyewitness reports that, 200 years after this initial lesson in trusting eyewitness testimony, another mystery concerning meteors continues to linger and be debated: that eyewitnesses sometimes report 'hearing' fireballs at the same time as they are seen, despite it being a 'scientific impossibility'. This now-accepted phenomenon was 'debunked' by scientists for centuries, right up until just a few decades ago.

For example, a number of witnesses who watched an impressive fireball tear through the sky over England on the 19th of March, 1719 reported hearing it make a hissing sound as it passed overhead:

> *I discern'd in the sky a large ball of fire, at about 20 or 25° height from the horizon… in a moment it was thrown into the shape of a common meteor, the head diminishing 'till it was all turn'd into a long stream of light… I thought I heard a noise of hissing, like what is made by the flying of a large rocket in the air, but I heard no other noise.*

The famous astronomer Edmund Halley was quick to dismiss these claims as "pure fantasy." Halley's reasoning (and that of other debunkers of the phenomenon since) was based in his understanding of the laws of science: from various observations, he had triangulated the

distance to the bolide. At more than 60 miles away, Halley noted it would have been impossible for anybody to hear the fireball at the same time as seeing it: as sound travels at around a fifth of a mile per second, it would have taken some five minutes to hear anything.

In 1784 the Secretary of the Royal Society Thomas Blagdon gathered a number of similar reports in connection with a spectacular bolide that had been seen over Scotland, England and Europe a year previously. Blagdon too was baffled by these alleged sounds heard coincident with the fireball sighting, and suggested they might best be explained psychologically, as the result of "an affrighted imagination."

A half century later, during the great Leonid meteor shower of 1833, many people again reported anomalistic sounds accompanying the largest fireballs. But in this case, a scientist went against the established 'truth' of the matter. Denison Olmsted, Professor of Mathematics and Natural Philosophy at Yale, found himself at odds with Halley's and Blagdon's conclusions, noting that eyewitness descriptions of the sounds occurred "too uniformly, and in too many instances, to permit us to suppose that they were either imaginary or derived from extraneous sources."[x]

However, Olmsted's opinion continued to be in the minority within scientific circles. It wasn't until the reality of electromagnetic waves was established in the late 19th century that the scientific paradigm would allow for an explanation for this anomalous phenomenon. And yet, even after the turn of the 20th century, leading scientists continued to ridicule reports of instantaneous sounds from meteors. The famous astronomer W.F. Denning wrote that "hissing and similar noises…may be dismissed as imaginary…[an] observational illusion." And in an article in *Popular Astronomy* in 1932, C.C. Wylie, Professor of Mathematics and Astronomy at the University of Iowa, wrote that "the explanation [for meteoric sounds] is without doubt psychological."[xi]

Despite multiple eyewitnesses over many years testifying to experiencing the same thing, leading scientists said that what they were experiencing was "imaginary," "an observational illusion," and "without doubt psychological." It's worth keeping these responses in mind when we begin laying out the evidence for experiences of an afterlife, which also consists of multiple eyewitnesses over many years testifying to experiencing the same anomalous phenomena – evidence which has been routinely dismissed by skeptics and scientists in extremely similar terms.

It would take until the late 20th century before electrophonic meteors, as they are now called, would enter scientific orthodoxy. After a massive fireball entered Earth's atmosphere over Sydney, Australia in 1978, resulting in a flood of eye-witness reports of these anomalous sounds, Professor Colin Keay of the University of Newcastle was intrigued – though he admits that, like most other scientists, he at first "rather fashionably dismissed these as a psychological effect." However, he was – as with the other rebellious scientists who came to accept the phenomenon as real – "persuaded otherwise" by the number of witness reports which clearly noted the sound was heard before the fireball was seen. From this *consistent, widespread, eyewitness testimony* Keay concluded that "the psychological explanation was not realistic and a physical explanation had to be sought." His research played a crucial role in orthodox science finally accepting the anomalous phenomenon as real.

The reason for this digression into the history of meteor science is to make clear, before we begin, that scientifically-collected anecdotes of spontaneous, anomalous phenomena – especially when those anecdotes agree with each other and are corroborated by serious investigators – should be considered as important evidential data. Also, that when we have evidence from different areas pointing at the same conclusion – such as people seeing stones falling from the sky, and other people finding strange rocks on the ground that have unearthly chemical compositions – we should consider this too as strong evidence supporting a hypothesis. And, crucially, that we should follow this evidence where it is leading us – even if the scientific orthodoxy deigns the obvious conclusion an impossibility. The phenomenon may just be explainable by – or even be crucial in leading us to – the next breakthrough in science.

It is useful to consider how the 'anomalous' evidence for stones falling from the sky, and the survival of consciousness, would stand up in a court of law. A court would require that the case be proved 'beyond a reasonable doubt', and would allow (and welcome) testimony from multiple, credible eyewitnesses. Note that 'beyond reasonable doubt' does not mean 'beyond all doubt'; that threshold is impossibly high, as irrational doubts might be present (e.g. 'what if the 300 independent, credible witnesses were all lying?'). The doubt must be *reasonable*.[xii]

This essay will show that, across multiple areas of research, there is now enough evidence supporting the survival of consciousness hypothesis for the case to be proved beyond reasonable doubt.

Brushes with death: Near-death experiences (NDEs)

Near-death experiences (NDEs) first gained widespread public attention in 1975, with the release of Raymond Moody's bestselling book *Life After Life*. In that book, he described many of the elements reported during an NDE with the following idealized example (most NDEs will not include every single aspect):

> *A man is dying and, as he reaches the point of greatest physical distress, he hears himself pronounced dead by his doctor. He begins to hear an uncomfortable noise, a loud ringing or buzzing, and at the same time feels himself moving very rapidly through a long dark tunnel. After this, he suddenly finds himself outside of his own physical body, but still in the immediate physical environment, and he sees his own body from a distance, as though he is a spectator. He watches the resuscitation attempt from this unusual vantage point and is in a state of emotional upheaval.*
>
> *…Soon other things begin to happen. Others come to meet and to help him. He glimpses the spirits of relatives and friends who have already died, and a loving warm spirit of a kind he has never encountered before – a being of light – appears before him. This being asks him a question, nonverbally, to make him evaluate his life and helps him along by showing him a panoramic, instantaneous playback of the major events in his life. At some point he finds himself approaching some sort of barrier or border, apparently representing the limit between earthly life and the next life. Yet he finds that he must go back to the earth, that the time of his death has not yet come. At this point he resists, for by now he is taken up with his experiences in the afterlife and does not want to return. He is overwhelmed by intense feelings of joy, love and peace. Despite his attitude, though, he somehow reunites with his physical body and lives.*
>
> *…the experience affects his life profoundly, especially his views about death and its relationship to life.*[xiii]

Researchers estimate that 10-20% of people who come close to death report NDEs, and they have been recorded throughout history and across cultures worldwide.[xiv] And while interpretations of the experience vary, the core elements remain the same. For instance, some 2000 years ago the Roman historian Plutarch mentioned the experience of one Aridaeus of Soli, who "fell from a certain height upon the nape of his neck and died…he was carried away to be buried when he came back to himself and rapidly recovered."[xv] Aridaeus told how, having 'died', he felt his spirit body exiting his physical body through his head, after which he had an out-of-body experience (OBE). His sense of vision when in this new 'spirit

body' was augmented – sharper, and strangely capable of viewing "around in all directions at once" – and he could now "move in all directions easily and quickly." A deceased relative who had died at a young age then appeared before him, showing Aridaeus the inner workings of the afterlife realms. Upon reviving from death, Aridaeus transformed himself, becoming purer of heart and helpful in his community.

Despite occurring two millennia in the past, the story of Aridaeus could be lifted straight from Moody's *Life After Life*. In fact, it even contains aspects that were not mentioned by Moody, but have since been found in multiple modern NDE reports. For example, Aridaeus spoke of being able to see "in all directions at once"; a recent account describes it in those exact words: "I could see in three dimensions…I could see all directions at once."[xvi] Another modern NDE explicitly notes "I could see 360 degrees around me at the same time."

Throughout history, we find the same elements repeating again and again in the testimony of people who have had a brush with death. What could explain these commonalities? For skeptics, the heavenly visions of the NDE can be explained simply as a delusion: hallucinations brought on by the various physical and/or psychological burdens put on the brain by its imminent demise. But just as we saw with early scientific opinions regarding meteors, this seems to be more a way of trying to explain it away, rather than valid science. Veteran NDE researchers Dr. Bruce Greyson, Dr. Emily Williams Kelly and Dr. Edward Kelly analyzed the explanations put forward by skeptics and found that not only are none of them supported by any research evidence, but also that most are in fact *contradicted* by the evidence.[xvii]

In their 2009 paper "Explanatory Models for Near-Death Experiences," the researchers systematically worked through the list of possible 'solutions' offered thus far, "paying special attention to how well they can account for the various features of NDEs." These skeptical explanations can be separated into two groups – psychological-based theories, and those focusing on physiological factors. In the former category we find offerings such as the 'expectation model' (in which NDEs are products of the imagination, created to protect ourselves when facing threat of death, and which conform to personal or cultural expectations); depersonalization (feelings of detachment and removal from reality when facing threat of death); 'the birth model' (the suggestion that the tunnel, bright light and otherworldly realms of the NDE are memories of our birth experience, reproduced at death); and personality factors (susceptibility to hypnosis and dissociation, fantasy proneness,

absorption, dream recall, etc.). Physiological-based explanations for NDEs include altered blood gas levels (lowered levels of oxygen, known as hypoxia or anoxia, or increased levels of carbon dioxide, known as hypercarbia); neurochemical theories (the release of endogenous endorphins, opioids or psychedelic-like chemicals such as ketamine or DMT during times of stress); neuroanatomical models (abnormal activity in parts of the brain, such as the limbic system and temporal lobes, brought on by stress and/or altered gas and chemical levels); and rapid eye movement intrusion (mentation typical of REM sleep intruding into waking consciousness).

But the researchers found that while many of these might *seem* like worthwhile candidates, the evidence did not support them. For instance, the birth model is contradicted by the fact that NDE accounts featuring 'travel through a tunnel to another realm' were just as common among those born by Caesarean section as with those born by normal vaginal delivery. Meanwhile, the expectation model is confounded by NDEs reported by children too young to have formed afterlife expectations, and also by NDEs in adults that often run sharply counter to the experiencer's beliefs about death and the afterlife. Brain stimulation studies have not provided the support for neuroanatomical models that supporters claim, with experiences reported in such situations bearing little resemblance to NDEs. And the altered blood gas levels theory falls flat as well as NDEs sometimes occur in situations where there are no changes in blood gas levels. Furthermore, as other researchers have pointed out, "any acute alteration in cerebral physiology such as occurring in hypoxia, hypercarbia, metabolic, and drug induced disturbances and seizures leads to disorganized and compromised cerebral function [and] impaired attention," but the NDEs reported by those who have suffered cardiac arrest "are clearly not confusional and in fact indicate heightened awareness, attention and consciousness at a time when consciousness and memory formation would not be expected to occur."[xviii]

"Almost all NDErs (near-death experiencers) report that their thinking processes were 'faster and clearer than they ever have been before'," Dr. Bruce Greyson notes, "despite their brain being impaired – for example, in cardiac arrest." Indeed, one analysis of 653 NDE reports of cardiac and/or respiratory arrest patients for unprompted, spontaneous references to quality of conscious mentation during an NDE found that both figurative and abstract mentation were reported to be either preserved or *markedly improved*.[xix]

One experience related by Greyson illustrates this, and begs the question as to whether the mind and the brain are really the same thing: the NDE of a man who overdosed on medication in a suicide attempt, and began hallucinating small humanoid figures surrounding him. After taking the overdose he had second thoughts and was trying to make it to the telephone to call for help when he had an OBE, during which his thinking became clear and the humanoid figures disappeared from view.

> *At that point he drew out of his body, and from a position about 10 feet behind his body, his thinking suddenly became crystal clear. And he looked at his body, and his body was looking around confusedly. And from where he was, 10 feet behind, he could not see these humanoid figures. But he remembered being in the body hallucinating. So here we have a brain that's still hallucinating, while the subject, the person, out of the body, is not hallucinating. So how does medical science make sense of that?*[xx]

The point that Greyson and his fellow researchers make clear in their paper is that *in isolation*, individual elements of the near-death experience could *possibly* be described by one or another of the theories put forward by skeptics, even though there is very little evidence supporting them. But "when several features occur together…and when increasing layers of explanation must be added on to account for them, these hypotheses become increasingly strained." Their conclusion on skeptical explanations for the NDE? "Theories proposed thus far consist largely of unsupported speculations about what might be happening during an NDE."[xxi]

In short, just as we saw with 17th century science's approach to meteors, in the case of NDEs we have masses of people through history reporting the same things – in this case, mind separating from body, and a transition to another realm equivalent to an afterlife – that skeptics and scientists insist is a delusion, even though their own solutions to the mystery do not hold up to scrutiny.

Not that it is a mystery to those who have undergone NDEs themselves: they are almost unanimously convinced that their experience was real, and their consciousness survived their physical death. Studies back up their surety: When experiencers were given a questionnaire designed to differentiate memories of real events from memories of imagined events,[xxii] it was found that they remembered their NDE "with more clarity, more detail, more context, and more intense feelings than real events from the same time period" – they were, in effect, recalled as "realer than real events."[xxiii] A subsequent study by researchers from the

University of Padova using electroencephalography (EEG) to compare characteristics of NDE memories with memories of both real and imagined events found similarly.[xxiv]

While this should be enough on its own to make us consider that NDE witness testimony is in fact what they say it is – rather than convoluted explanations from skeptics that don't hold up to close examination – there is one extra element that is a knockout punch: in a number of NDEs with an out-of-body experience component, the experiencer observes things that they shouldn't have been able to perceive, which are later able to be confirmed. These are known as 'veridical NDEs'.

Veridical NDEs

Veridical accounts are hardly a rare occurrence: Researcher Janice Miner Holden surveyed the NDE case literature and collected some 107 cases where impossible observations reported by the person having the NDE were later verified. She concluded that "the sheer volume of anecdotes that a number of authors over the course of the last 150 years have described suggests [veridical NDE perception] is real," and furthermore that "the cumulative weight of these narratives [should be enough to] convince most skeptics that these reports are something more than mere hallucinations on the patient's part."[xxv]

For example, the case of 'Dentures Man' consists of evidence of such high quality that it was included in a paper in the respected medical journal *The Lancet*. In this case from 1979, a 44-year-old man ('Mr. B') was brought into the emergency department at Canisius Hospital in the Netherlands by ambulance, after being discovered comatose, hypothermic and without a pulse in a cold, damp meadow in the middle of the night. Hospital staff, including the senior nurse ('T.G.'), were beginning resuscitation when T.G. noticed that Mr. B was wearing dentures, so removed them and placed them on the 'crash cart' so that he could put a ventilation mask on the unconscious man. After Mr. B was successfully resuscitated, he was transferred to the Intensive Care Unit; as such, T.G. did not see the man again until a week later while doing rounds distributing medication. T.G. was astonished when, as he walked into the room, the patient he had brought back to life exclaimed "Oh, that nurse knows where my dentures are!" Seeing the look of surprise on T.G.'s face, Mr. B explained himself: since coming back to consciousness, he had been looking for his dentures. "You were there when I was brought into hospital and you took my dentures out of my mouth and put them onto that cart," he said. "It had all these bottles on it and there was this sliding drawer underneath and

there you put my teeth." T.G. was confused by this, as he remembered that he had done this when the patient was unconscious and undergoing CPR to bring him back to life:

> *When I asked further, it appeared the man had seen himself lying in bed, that he had perceived from above how nurses and doctors had been busy with CPR. He was also able to describe correctly and in detail the small room in which he had been resuscitated as well as the appearance of those present like myself. At the time that he observed the situation he had been very much afraid that we would stop CPR and that he would die. And it is true that we had been very negative about the patient's prognosis due to his very poor medical condition when admitted. The patient tells me that he desperately and unsuccessfully tried to make it clear to us that he was still alive and that we should continue CPR. He is deeply impressed by his experience and says he is no longer afraid of death. Four weeks later he left hospital as a healthy man.*[xxvi]

To be clear: according to the medical professionals working on Mr. B, everything he witnessed during his NDE took place when he was unconscious, with no blood circulation and thus no brain activity.[xxvii] According to currently accepted medical science, he could not have observed the removal of his dentures in any normal way, even by some reconstruction through imagination and memory based on touch and sounds, as his brain was shut down at the time the dentures were removed. And yet Mr. B. accurately related multiple details of the room, the people in it, and what was occurring, as he saw it from a vantage point near the ceiling.

Another example is that of Al Sullivan. During emergency quadruple bypass surgery in 1989, Sullivan felt his consciousness separate from his physical body, and after traveling through a "black, billowy smoke-like atmosphere," found himself near the ceiling of the OR looking down upon his own life-saving surgery:

> *I was laying [sic] on a table covered with light blue sheets and I was cut open so as to expose my chest cavity. It was in this cavity that I was able to see my heart on what appeared to be a small glass table. I was able to see my surgeon, who just moments ago had explained to me what he was going to do during my operation. He appeared to be somewhat perplexed. I thought he was flapping his arms as if trying to fly…*[xxviii]

Sullivan also noticed that his own chest cavity was being held open by metal clamps, and was puzzled by the fact that two other surgeons were working on his leg, rather than his heart. He was then distracted by a "most brilliant yellow light" coming from what appeared to be a

tunnel to his lower right-hand side (as is common in NDE descriptions of the light, Sullivan noted that although it was "the brightest I had ever looked into, it was of no discomfort to the eyes at all"). He then experienced "warmth, joy and peace and a feeling of being loved" followed by an encounter with his deceased mother, who had died at age 37 when he was just 7 years old.[xxix]

> *All at once my mother's expression changed to that of concern…she left my side and drifted down toward my surgeon. She placed the surgeon's hand on the left side of my heart and then returned to me. I recall the surgeon making a sweeping motion as if to rid the area of a flying insect. My mother then extended one of her hands to me, but try as I might I could not grasp it. She then smiled and drifted back toward the lit tunnel.*[xxx]

Upon regaining consciousness, Sullivan told his cardiologist Dr. Anthony LaSala of his NDE, and some of the confusing details he had noticed during the surgery. Initially skeptical, Dr. LaSala paid more attention when Sullivan described the 'flapping elbows' of the cardiac surgeon, Dr. Hiroyoshi Takata, as this was an idiosyncratic habit of his that Dr. LaSala had witnessed himself – after scrubbing in, Dr. Takata would point at things using his elbows to avoid contamination of his hands, giving the impression that he was impersonating a bird attempting to fly.

NDE researcher Dr. Bruce Greyson investigated this report and spoke to both doctors involved in the surgery. Dr. LaSala confirmed that Sullivan had recounted his NDE immediately after regaining consciousness, noting the 'flapping' elbows of Dr. Takata – and confirmed that he had never seen any other surgeon do this. Dr. Takata also confirmed that during the operation he stood with hands on chest, pointing with his elbows. Greyson also noted that Sullivan's OBE observations of the open chest cavity and surgeons working on his leg – which he later learned was the stripping of a vein out of his leg to create the bypass graft for his heart – offer a 'time anchor' which confirmed that "Mr. Sullivan's observation of Dr. Takata flapping his arms occurred when he was under general anesthesia and, at least to observers, unconscious."[xxxi]

Yet another case is that of musician Pam Reynolds, who underwent surgery to fix a brain aneurysm. As part of the procedure, Reynolds' body was cooled down and her heart (and thus blood circulation) brought to a halt, allowing the neurosurgeon, Dr. Robert Spetzler, to drain the blood from her head while in this cooled state and operate on the aneurysm.

Upon recovering, Reynolds reported to her doctors that during surgery she had undergone an experience of first leaving her body and viewing the operation, and subsequently visiting an afterlife-like realm. Reynolds recounted that she had…

> *…suddenly been brought to consciousness by the piercing sound of the cranial saw. She said the saw emitted a natural D tone and that it pulled her out of the top of her head. She came to rest at a location near Spetzler's shoulder. She described a sense of awareness far greater than she had ever experienced before, as well as greatly enhanced "vision" with which she saw with clarity and detail the cranial saw, her head, the operating room (OR), and OR personnel. She saw things that she had not expected or that contradicted her expectations, such as the appearance of the cranial saw, the interchangeable saw blades in a socket-wrench-type case, and the way her head was shaved. She also was somewhat dismayed to see someone conducting a procedure in her groin area when this was supposedly brain surgery. From that area, she heard a female voice report that the vessels were too small on the right side, and a male voice directing her to try the other side.*[xxxii]

After subsequently transitioning to an 'afterlife environment', Reynolds says she encountered deceased loved ones, including her grandmother and an uncle. Later, this uncle accompanied her back to the surgery to assist her in returning to her body.[xxxiii]

Of special interest in the Pam Reynolds case is the difficulty in explaining away her out-of-body observations as recreations based on what she saw and heard while ostensibly unconscious. During the procedure her eyes were taped shut,[xxxiv] and a loud clicking noise (11 times per second at 95 decibels) and white noise were alternately played directly into her ears in order to monitor her brainstem activity, through small speakers molded and glued into her ears which were then covered over by "mounds" of tape and gauze).[xxxv] According to the man responsible for inserting these speakers, it is unlikely that Pam would have been able to hear anything of what was occurring in the OR at the time.[xxxvi]

The neurosurgeon who led the procedure, Dr. Spetzler, also doesn't believe Reynolds could have reconstructed the scene from sensory input: "The drill and so on, those things are all covered up. They aren't visible; they were inside their packages. You really don't begin to open until the patient is completely asleep, so that you maintain a sterile environment… At that stage in the operation nobody can observe, hear in that state. And I find it inconceivable that the normal senses, such as hearing, let alone the fact that she had clicking modules in

each ear, that there was any way for her to hear through normal auditory pathways. I don't have an explanation for it. I don't know how it's possible for it to happen."[xxxvii]

We could go on at length; as mentioned earlier, *more than one hundred* veridical NDE cases have been identified in the literature thus far. Suffice to say, they are not rare enough to be easily explained by lucky guesses or chance. Research backs that up: cardiologist Dr. Michael Sabom surveyed patients who had undergone a resuscitation – including both those who had reported an NDE, and those who hadn't – asking them to describe what their resuscitation 'looked' like. He found that the descriptions of 25 cardiac patients who did not report an NDE were significantly less accurate than the accounts of the 32 near-death experiencers (NDErs) he interviewed. Sabom's research showed that 80% of those who didn't have an NDE made at least one major error in their description, but none of the NDErs did so. Furthermore, 6 of the 32 NDErs went even further in describing unexpected events that occurred during their resuscitation, that they wouldn't have been expected to have any recall of.[xxxviii] Sabom's conclusion? NDErs do indeed seem to be describing actual observations of their resuscitation, rather than recreating them from their imagination and sensory cues.[xxxix]

And we could go farther back in history: more than a century ago, Scottish surgeon Sir Alexander Ogston (ironically, himself no stranger to skepticism from the establishment – his paradigm-breaking discovery of the *Staphylococcus* bacteria in the 19th century was met with disbelief and in some cases outright hostility by medical authorities) reported a veridical NDE during the South African War. Admitted to hospital suffering from typhoid fever, Ogston reported that as he lay in a stupor, his mind and body became two separate entities. "I was conscious of the body as an inert, tumbled mass near a door, it belonged to me but was not I," Ogden noted. "In my wanderings there was a strange consciousness that I could see through the walls of the building, though I was aware that they were there and that everything was transparent to my senses." Ogden recalled that during his OBE he saw "a poor Royal Army Medical Corps surgeon, of whose existence I had not known, and who was in quite another part of the hospital, grow very ill and scream and die; I saw them cover his corpse and carry him softly out on shoeless feet, quietly and surreptitiously, lest we should know that he had died, and the next night I saw him taken away to the cemetery. Afterwards when I told these happenings to the sisters, they informed me that all this had happened just as I had fancied."[xl]

If there were only one or two cases of veridical NDEs, skeptics of the survival of consciousness might just be able to rely on ‘reasonable doubt’ to dismiss the evidence. However, the cumulative weight of cases – and quality of the investigations ruling out alternative explanations, can only be seen as convincing proof that consciousness does in fact separate from the body when close to death.

Actual death: End-of-life experiences (ELEs)

On their own, near-death experiences – especially veridical NDEs – provide compelling evidence that during brushes with death our consciousness can separate from the body and continue on in some form. However, there are a number of other anomalistic experiences regularly reported as occurring at the *actual* end of someone's life – often grouped under the umbrella term 'end of life experiences' (ELEs) – that add to that body of evidence and provide even more support for the hypothesis. These include:

- death-bed visions or dreams in which the dying person encounters and often communicates with deceased loved ones, and transitions to and from afterlife-like realms which feature feelings of love and light
- strange phenomena experienced by family and carers attending to the dying
- death-bed coincidences or 'crisis apparitions', in which someone emotionally close to the dying person becomes aware of them at the moment of their death
- 'terminal lucidity', in which patients with severe impairment suddenly and unexpectedly become aware of their environment and interact with family and carers.

Like NDEs, these experiences are *not* rare occurrences – in fact, ELEs are exceedingly common, and have been reported in the deaths of well-known figures including George Harrison,[xli] Thomas Edison and Steve Jobs.[xlii] In a 2010 study lead by neuropsychiatrist Dr. Peter Fenwick, researchers found that *almost two-thirds* of doctors, nurses and hospice carers reported witnessing ELEs with dying patients.[xliii] The survey confirmed the findings of previous studies: an Irish study of carers in 2009 also found that around two-thirds of respondents witnessed end-of-life experiences in their patients,[xliv] while another study in the U.S. in 2007 had found that more than half of the 525 surveyed carers reported instances of a dying person having a death-bed vision.[xlv] It is worth remembering that all these surveys are only of carers and family reporting ELEs – the number is likely to be much larger as they don't include data from the people actually going through the dying process.

Just as we saw with NDEs, ELEs do *not* seem to be an hallucinatory by-product of a malfunctioning brain: the vast majority of the carers interviewed in Fenwick's study "agreed that ELEs were not due to confusional states resulting from either medication or the toxic processes involved in dying," and "usually occurred in clear consciousness."[xlvi] In fact,

research has found that dying patients were *less* likely to have ELEs if they were medicated with drugs, or suffering from an illness which affected their normal state of consciousness.[xlvii]

What's more, carers consider these end-of-life experiences "to be profoundly subjective and meaningful events" that often "helped the individual to let go of life and lessened the fear of dying." Rather than being confusing hallucinations, ELEs were seen as important 'spiritual' events, imbued with personal meaning, which helped ease the distress of dying.

Death-bed visions and 'Peak-in-Darien experiences'

Death-bed visions are experiences in which a dying person sees already-departed loved ones – and also on some occasions, what appear to be otherworldly entities such as 'angels' – visiting their bedside in the hours, days, and sometimes weeks leading up to their passing. These incorporeal visitors are said to have come to greet the dying individual and guide them into the afterlife. For example, a recent account from a palliative carer told how a woman…

> *…about an hour before she died said, "they're all in the room; they're all in the room." The room was full of people she knew and I can remember feeling quite spooked really and looking over my shoulder and not seeing a thing but she could definitely see the room full of people that she knew.*[xlviii]

They are extremely common experiences, found across cultures worldwide,[xlix] and have remained remarkably consistent across time. As the writer Frances Cobbe explained in *The Peak in Darien* – her 1882 book that discussed strange phenomena reported by the dying – over and over again death-bed visions are described "almost in the same words by persons who have never heard of similar occurrences, and who suppose their own experience to be unique."[l] Dying patients recount these visions calmly and rationally to others at the bedside such as family or carers; so much so that they are often observed to be almost living in two worlds, swapping nonchalantly between chatting to those in the here-and-now, and then with already-dead loved ones, or being immersed in an alternate reality full of love and light.[li]

One account related a century ago by the British physicist Sir William Barrett offers a fine example. Hattie Pratt was a schoolgirl who passed away from diphtheria in the early 1900s. As her family gathered around during her final hours, another family member –already deceased – appeared to greet young Hattie and guide her onwards. Hattie's brother recounted that while Hattie's throat "was so choked up" it required close attention to catch all of her words, "her mind seemed unusually clear and rational":

She knew she was passing away, and was telling our mother how to dispose of her little personal belongings among her close friends and playmates, when she suddenly raised her eyes as though gazing at the ceiling toward the farther side of the room, and after looking steadily and apparently listening for a short time, slightly bowed her head, and said, "Yes, Grandma, I am coming, only wait just a little while, please." Our father asked her, "Hattie, do you see your grandma?" Seemingly surprised at the question she promptly answered, "Yes, Papa, can't you see her? She is right there waiting for me." At the same time she pointed toward the ceiling in the direction in which she had been gazing. Again addressing the vision she evidently had of her grandmother, she scowled a little impatiently and said, "Yes, Grandma, I'm coming, but wait a minute, please." She then turned once more to her mother, and finished telling her what of her personal treasures to give to different ones of her acquaintances. At last giving her attention once more to her grandma, who was apparently urging her to come at once, she bade each of us good-bye. Her voice was very feeble and faint, but the look in her eyes as she glanced briefly at each one of us was as lifelike and intelligent as it could be. She then fixed her eyes steadily on her vision but so faintly that we could but just catch her words, said, "Yes, Grandma, I'm coming now."

Hattie's brother remarked that her clear-headedness during her final minutes, and alternation of attention between her dead grandmother and the rest of her still-living family (what Barrett calls 'double consciousness'), "were so distinctly photographed upon the camera of my brain that I have never since been able to question the evidence of the continuance of distinct recognizable life after death."[lii]

Hattie Pratt's experience is just one of many cases discussed by Barrett in his seminal 1926 book *Death-bed Visions*. In researching the phenomenon, Barrett was particularly impressed by the commonalities related by those of a younger age, who would likely not have had a cultural expectation of the visions they saw. In fact, in several cases, the dying visions of children categorically did *not* agree with what their Christian upbringing had primed them to expect. For instance, 10-year-old Daisy Irene Dryden exclaimed during a death-bed vision in the final days of her illness, "We always thought the angels had wings! But it is a mistake; they don't have any."

Like NDErs, the dying describe the realm they will soon move to as being bathed in love, light and peace. For example, in Italy a wife ran to her dying husband's side only to be told by him that her mother – who had died 3 years previously – was "helping me to break out of

this disgusting body. There is so much light…so much peace."[liii] Furthermore, Dr Peter Fenwick points out, those having death-bed visions also sometimes experience other elements of the archetypal NDE, such as a life review and a border that must be crossed to transition to the afterlife realm. The similarities between NDEs and ELEs, Fenwick says, "suggest that both could be experiences of the same after-death reality."[liv]

And there is a category of death-bed vision that is similar in evidential value to the veridical NDE, offering even further support that what these people are seeing is real. In *The Peak in Darien*, Frances Cobbe wrote of an incident "of a very striking character": a dying lady suddenly became joyful, and told those at her bedside that, one after another, three of her dead brothers had appeared in the room. Then, strangely, a fourth brother appeared alongside the others, despite being believed by all present to be alive and well at his residence in India. As this occurred in the late 19th century, there was no way of instantly checking on the brother, but letters were subsequently received informing the family of his death – at a time before his dying sister saw him in her vision.

Though Cobbe's book covered a variety of strange phenomena, its title has become the unofficial name for this specific type of death-bed account, in which the dying are visited by an individual who was believed by them to be alive, but were actually deceased at the time of the vision: Peak-in-Darien experiences. Sir William Barrett believed such experiences provided "one of the most cogent arguments for survival after death, as the evidential value and veridical (truth-telling) character of these Visions of the Dying is greatly enhanced when the fact is undeniably established that the dying person was wholly ignorant of the decease of the person he or she so vividly sees." Barrett's contemporary Professor Charles Richet, who won the Nobel Prize in Physiology or Medicine in 1913, noted that "among all the facts adduced to prove survival, these seem to me to be the most disquieting, that is, from a materialistic point of view."[lv]

Like veridical NDEs, there are a surprisingly large number of Peak in Darien experiences recorded in the literature. Sir William Barrett devoted an entire chapter of his book *Death-Bed Visions* to cases of this type. One well-documented example was a woman named 'Mrs. B' (also referred to as 'Doris'), who had just given birth to a baby, but died shortly after from heart failure. Lady Florence Barrett was present as the attending obstetrician, and after she told her husband what happened, he investigated further and gathered testimony from others present during the incident.

As she began to slip away, Mrs. B had gripped Lady Barrett's hand tightly and asked her not to leave, saying "It's getting so dark…darker and darker." Mrs. B's husband and mother were sent for, but her desperation suddenly turned to rapture. Looking across the room, a radiant smile lit up her face. "Oh, lovely, lovely," she cried. When asked what she was seeing, Mrs. B replied "Lovely brightness, wonderful beings." Lady Barrett was shaken by the conviction with which she said this, noting it was difficult "to describe the sense of reality conveyed by her intense absorption in the vision."

Mrs. B then focused on a particular point in the air, and cried joyously when a deceased loved one appeared to her: "Why, it's Father! Oh, he's so glad I'm coming." Mrs. B spoke to her father, saying, "I am coming," before turning to her mother at the bedside to tell her, "Oh, he is so near." On looking back to the vision of her deceased father, she then said, with a puzzled expression, "He has Vida with him." Vida was Mrs. B's sister, whose death three weeks previously she had not been informed about, so as not to cause any aggravation to her own health. Mrs. B died within the hour.

A similar example from more modern times is that of a Chinese lady, terminally ill with cancer, reported by hospice nurses Maggie Callanan and Patricia Kelley in their 1993 book *Final Gifts*. The dying lady had been having recurrent visions of her deceased husband, who was calling her to join him:

> *One day, much to her puzzlement, she saw her sister with her husband, and both were calling her to join them. She told the hospice nurse that her sister was still alive in China, and that she hadn't seen her for many years. When the hospice nurse later reported this conversation to the woman's daughter, the daughter stated that the patient's sister had in fact died two days earlier of the same kind of cancer, but that the family had decided not to tell the patient to avoid upsetting or frightening her.*

As with veridical NDEs, the sheer number of Peak-in-Darien cases provides evidence that cannot be brushed away simply as chance occurrences.

Death-bed phenomena

Strange experiences reported at the time of death, including NDEs and death-bed visions, are often dismissed by skeptics – incorrectly, as we have seen – as artifacts of the dying patient's misfiring brain. But such 'skeptical' explanations are confounded by the fact that, in quite a

number of cases, other healthy people present in the room with the dying also experience similar visions.

For example, while those dying have commonly reported being immersed in a loving, peaceful light, many of those caring for the dying – who are not ill or approaching death – have *also* described seeing a bright light surrounding the dying person, exuding what they relate as "a raw feeling of love."[lvi] And again, this anomalous experience is not a rare occurrence: a survey found that *one in every three* palliative carers reported accounts of "a radiant light that envelops the dying person, and may spread throughout the room and involve the carer." In a similar Dutch study, *more than half* of the carers surveyed reported witnessing this 'light'![lvii]

One respondent to a questionnaire put to palliative care nurses in Australia told how he, another nurse, and the patient's husband *all* saw a light leave the body of the patient and drift toward the ceiling. "As she died we just noticed like an energy rising from her…sort of a bluey white sort of aura," the nurse explained. "We looked at each other, and the husband was on the other side of the bed and he was looking at us… he saw it as well and he said he thinks that she went to a better place." This experience was transformative for the nurse: "It probably changed the way I felt about people dying and what actually happens after death."[lviii]

Similarly, Dr Peter Fenwick relates an instance in which a person, at the time of their brother's death from cancer, witnessed "odd tiny sparks of bright light" emanating from the body – and these 'sparks' were also seen by her brother's wife, who was also present.[lix] Given the phenomenon is seen by *multiple people* at the bedside, we can confidently discount mundane explanations such as it being caused by a stress-induced hallucination or wishful thinking.

Strange lights are not the only thing witnessed by family and carers at the bedside of the dying. There are many eyewitness accounts in which what is described variously as "smoke," "mist," wavy air "like the heat haze of a mirage," or a "very wispy white shape" is seen leaving the body, usually from the chest or head area.[lx] For example, one witness saw "a plume of smoke rising, like the vapor that rises from a snuffed-out candle, but on a bigger scale…it was being thrown off by a single blade of phosphorus light. It hung above Dad's bed, about 18 inches or so long, and was indescribably beautiful…it seemed to express perfect love and peace."[lxi] Another carer's experience was of seeing "distinct delicate

waves/lines of smoke (smoke is not the right word but I have not got a comparison)" above the body which then disappeared, leaving them with "a sense of peace and comfort."[lxii] Immediately after the death of a friend, a woman says she saw "the air was moving" directly above her body, "rather like a heat haze you see on the road but swirling slowly around."[lxiii] A doctor assisting somebody who had a heart attack said he witnessed "a white form that seemed to rise and separate from the body."[lxiv] And an Australian carer was actually inspired to conduct academic research into the subject of ELEs because of her own experience: "There was a young man who had died in the room with his family and I saw an aura coming off him," she recounts. "It was like a mist. I didn't tell anybody for years."[lxv]

Family, carers and physicians have also reported a multitude of other phenomena occurring at the time of death: apparitions of the dead, voices calling, the sounds of heavenly music/angelic choirs singing, the feeling of a strong wind blowing, and mechanical/electrical failures at the time of passing. Dr Peter Fenwick's survey of British palliative carers found that 33% noted experiences of "synchronistic events" at the moment of death, such as clocks stopping, electronic devices shutting down, and lights going on and off.[lxvi] More than a hundred years before that survey, a 19th century researcher found so many recorded reports of such happenings that he concluded that they "cannot be considered a mere fiction."[lxvii]

In his book *Death-bed Visions,* Sir William Barrett told of a seventeen-year-old girl who, after a prolonged illness, was in her final days. Her already-widowed mother, facing the second major loss of a loved one, was tending to her when she noticed the girl was absorbed in something nearby. Querying her as to what she was so focused on, the girl pointed to the bed-curtains and asked what her mother saw. "I followed the direction of her hand and saw a man's form, completely white, standing out quite clearly against the dark curtain," the mother recalled later. "Having no ideas of spiritism, my emotion was intense, and I closed my eyes not wishing to see any longer." The girl was puzzled by her mother's silence, asking why she didn't reply, but her mother – through fear, or incredulity – was unable to admit to the vision. "I had the weakness to declare to her, 'I see nothing'; but my trembling voice betrayed me doubtless, for the child added with an air of reproach, 'Oh, little mother, I have seen the same thing for the last three days at the same hour; it's my dear father who has come to fetch me'."[lxviii]

Dr Peter Fenwick was told by a lady that while sitting at her dying husband's bedside there was suddenly "a most brilliant light shining from my husband's chest." The light began to

rise toward the ceiling, and she heard "the most beautiful music and singing voices," filling her with an overwhelming feeling of joy.[lxix] Researcher D. Scott Rogo catalogued many accounts of transcendent music being heard at the time of death: one such case was that of a woman who was caring at home for her aunt, who had terminal cancer, when one day, while walking up the stairs to the aunt's room to bring her lunch, she felt "a rush of very warm air." Then, as she approached the door to the bedroom she was "startled to hear faint strains of beautiful music, that came from her room and dwelt lightly in the hall where I was." Upon opening the door, it was immediately obvious to her that her aunt "was seeing something that I could not, even though I did hear the music." As she stood spellbound by the sight, her aunt turned to face her, "smiled the most peaceful and happy smile I ever saw," and gently fell back on the pillow, dead.[lxx]

When the former Prime Minister of the United Kingdom Arthur James Balfour was on his death-bed, his niece Jean Balfour – who was sitting by his bedside – experienced "a sensation of a mighty rushing wing (which was entirely subjective, as nothing around me was even stirred), and that the room was full of a radiant, dazzling light…[and] it seemed to me that there were people there too; they had no concern with me, they were invisible; but I knew that they were clustered about A.J.B.'s bed, and that their whole attention was concentrated on him."[lxxi]

These phenomena have, quite simply, been experienced constantly throughout the ages at the time of death – and they defy skeptical explanations.

Death-bed coincidences and 'crisis apparitions'

Anomalous experiences at the time of death are not restricted to the dying or those in the room with them: many people have reported having ominous feelings, seeing apparitions, and dreaming of the dead at the time of their passing, despite being removed from them by some distance. Over the years literally thousands of these experiences have been reported and investigated.[lxxii]

One astounding account is that of a mother who dreamt that her son had drowned:

> *I saw my twenty-two-year-old son walking toward me, his clothes dripping wet. He was talking to me, telling me that he was dead but that I was not to worry or be upset because he was all right… When I woke I was very disturbed and tried to contact my son. I found out later that day that he*

had been drowned the previous night. I am convinced that he did contact me… I have drawn great comfort from his visit to me over the years.[lxxiii]

Respected psychologist Dr. Stanley Krippner has told how he, at the age of 12 – while awake – "had a sudden premonition that my uncle had died. And, I was in my room, and heard downstairs the phone ring, and then I heard sobbing and crying, and indeed my cousin had just told my mother, saying that her father – my uncle – had just died. That was quite an alarming experience, I didn't tell anybody about that for years."

A major investigation of cases of this type was undertaken in the late 19th century by the British Society for Psychical Research (S.P.R.), an organization blessed with a membership consisting of some of the most respected intellectuals of the time, who nevertheless were committed to scientific investigation of strange phenomena suggestive of the survival of consciousness beyond death. The S.P.R. invested much time and effort collecting testimony from the public about such phenomena, even publishing advertisements in major newspapers and periodicals.[lxxiv] The response to their enquiries was overwhelming, and one experience that was reported often was that in which a dying person was 'seen' by family at a remote location as they passed away (labeled 'crisis apparitions' by the S.P.R.). The Society's researchers quickly realized that crisis apparitions differed substantially from the more commonly known ghost stories, not least due to their lack of 'spook factor': such tales, were – apart from the extraordinary nature of what they implied – overtly ordinary. Witnesses simply saw someone they knew, who would then disappear from view – there was no fright involved, only confusion as to what was just seen. It was only after some time had passed (remembering that in this era, communication took some time) they would they find out that the individuals who had appeared to them had died around the same time as the vision.

In 1886 the S.P.R. published their detailed report on such accounts as a book, under the title *Phantasms of the Living*. More than 1300 pages long and consisting of *over 700 cases*, the work involved in compiling the two-volume report was meticulous: researchers would follow up each case reported to them, interviewing the witness and verifying the account with testimony from third parties, contemporary written reports, and so on.

One 'textbook' case presented in *Phantasms of the Living* was that of Lieutenant-General Albert Fytche, who served as the Chief Commissioner of the British colony of Burma during the 1860s. Arising from bed one morning, Fytche was please to find an old friend had come to visit him. He greeted him warmly and suggested to the friend that they meet on the

veranda for a cup of tea, though the man didn't seem to respond in any way. When Fytche went to join him a few minutes later, the friend was nowhere to be found. Fytche was shocked to later read in the newspaper that this friend had died at the time he had seen him, some 600 miles distant.[lxxv]

The S.P.R.'s investigation revealed the huge volume of accounts of this nature occurring to everyday people. And in the modern day, Dr Peter Fenwick's survey of palliative carers shows that they continue unabated: a full *half* of respondents said that they were aware of "coincidences, usually reported by friends or family…who say the dying person has visited them at the time of death."[lxxvi]

Could it be, as many skeptics might argue, that the prosaic explanation for such 'coincidences' is that we should in fact expect them as random, mundane occurrences in any survey of a large number of people? The S.P.R. investigated this by surveying more than 5000 individuals and extrapolating the results; they found that chance could not explain the number of well-attested crisis apparitions in their collection.[lxxvii] And S.P.R. researcher Edmund Gurney was scathing on the question of whether accounts may have been made-up, noting that they had been collected from well-regarded members of the public, and the S.P.R.'s investigators had done much work to corroborate stories before including them. "When we submit the theory of deliberate falsification to the cumulative test…there comes a point where the reason rebels," he wrote.[lxxviii]

Furthermore, like cases at the bedside of the dying, some reports also featured multiple witnesses. For example, in one case a man and his son simultaneously saw his father's face above them, although his wife did not (though she did acknowledge witnessing their reaction and comments at the time), only later learning that the man's father had died at this time.

In the mid-20th century, researcher G.N.M. Tyrell identified *130 cases in which crisis apparitions were perceived by two or more people*. Furthermore, he remarked that he had "no doubt that this list is not exhaustive."[lxxix]

Terminal Lucidity

One other strange phenomenon witnessed near the time of death is what is variously referred to as 'terminal lucidity', 'lightening up before death', or 'premortem surge'. In these cases, those who care for people suffering from dementia or other severe ailments report that their

patients spontaneously and unexpectedly (given their diagnosis and disease severity) "speak or behave in ways that appear to suggest lucid awareness of their environment, including return of memory and verbal function,"[lxxx] in the hours or days before their passing. This 'return to lucidity' often allows dying patients to say goodbye to family members. Cases such as these are hard to explain in terms of mainstream brain science, given they occur in situations where the medical diagnosis makes the possibility of spontaneous remission unlikely, as damage to the brain suffered by these patients "is considered to be irreversible."[lxxxi]

In a British survey of caregivers, approximately 70% stated they had witnessed terminal lucidity in the preceding past five years in dying patients.[lxxxii] Similarly, in an Irish study, "one of the most frequent experiences" reported by palliative carers (57.5% of respondents) was 'Patients in a deep coma becoming suddenly alert enough to say goodbye to relatives'.[lxxxiii] Dr. Michael Nahm noted that such cases have been reported throughout history, with classical scholars such as Hippocrates, Plutarch and Cicero all recording its occurrence;[lxxxiv] and with a research team he collected 83 case reports of terminal lucidity.[lxxxv]

In a prospective study carried out in New Zealand, 100 consecutive deaths in a hospice were observed. In six of those deaths, unexpected spontaneous return of cognitive functions and verbal ability occurred in the 48 hours before the death of the patient.[lxxxvi] A more recent study, focusing exclusively on 124 cases of dementia-related (i.e. those in which medical science says there can be no spontaneous cognitive improvement) paradoxical lucidity found that in around 80% of the cases, complete remission with return of memory, orientation, and responsive verbal ability was reported by observers, with the majority of patients dying within a day of the episode:

> *[P]atients were rated as "clear, coherent, and just about normal verbal communication" during the lucid episode. In terms of the duration of the lucid episode, the median value was between 30 and 60 min… In 123 of the 124 reports (one report didn't list this data), the median survival after the lucid episode was between 2 and 24 hr.*[lxxxvii]

The researchers in this study also pointed out possible parallels between terminal lucidity and the NDE, as both often feature "unexpected cognitive arousal" in the face of compromised brain function,[lxxxviii] remembering that in the majority of NDEs mental functioning was reported to either be as good as usual, or even markedly improved.[lxxxix]

What are we to make of all this – death-bed visions and Peak in Darien accounts, experiences of family and carers at the bedside (sometimes involving multiple witnesses), death-bed coincidences and crisis apparitions, and terminal lucidity? At some point when digging into the huge volume of cases of these types, we feel as if we're desperately reaching for mundane explanations to satisfy the current scientific paradigm, rather than simply following the evidence to the obvious conclusion: that all these witnesses are observing what happens during the transition from this world to the next.

Comparing eyewitness testimony regarding extraordinary phenomena at the death-bed to the testimony of witnesses to meteor falls prior to the 18th century – including many incidents in which multiple people saw the same thing – it feels we are repeating the same situation all over again: a fight to integrate anomalous evidence into an incomplete system of knowledge, rather than simply updating that system based on the evidence.

To quote Peter and Elizabeth Fenwick, diligent researchers of ELEs:

> *To keep on citing 'coincidence' for all the very convincing accounts we have been given, becomes first a weak and then a frankly implausible explanation… [T]he hypothesis of extended mind manifesting at the time of death is a much more persuasive explanation for most of these experiences than coincidence or expectation.*[xc]

Beyond death: Communication from the dead

While the idea that certain people can 'talk' to the dead is a popular one in modern pop culture, the practice has been an intrinsic part of human culture since the dawn of time. The archaeological record and historical literature contain many references to apparent communication with the spirit world.[xci] In the Biblical Old Testament, the 'Witch of Endor', mentioned in the First Book of Samuel, was "a woman that divineth by a ghost": what we today call a 'spirit-medium', or more simply just 'medium'. In China, spirit-mediums are known as *wu,* or *ji-tong,* and their historical origin can be traced back at least 4000 years.[xcii] In Japan, the *itako* were blind, usually female, shamans from northern Japan who were said to have the ability to communicate with the dead. And the original word *shaman*, which most of us know today, is taken from the Evenki people of northern Siberia, and denotes a person who, among other duties, could act as a vehicle for making contact with deceased ancestors.

The word 'medium' is self-explanatory: it refers to a person who acts as the medium, or conduit, for communication between the spirit world and ours. It's important to note that there are different types of medium. *Physical mediumship* is where the communicating spirit is believed to interact with the physical world: objects are moved/appear, lights are seen or wind is felt, and sometimes the dead even seem to appear in physical form. *Mental mediumship*, on the other hand, is concerned with communication through the mind of the medium. And mental mediumship itself is often divided into two particular types: *trance* and *non-trance.*

Trance mediums will typically, at the beginning of the session ('sitting'), slip into an altered state, and their normal personality is displaced by an intruding intelligence – apparently that of a deceased person – that takes over the medium's mind and body. The trance personality then communicates with those present ('sitters'), sometimes by holding conversations through the medium's voice, or sometimes via writing and general gestures. Often a certain trance personality comes to be the main 'control' of the medium, acting as the intermediary between sitters and those on 'the other side'.

Non-trance mental mediumship includes the sub-group most are familiar with today: similar to well-known television mediums, like John Edwards or Theresa Caputo, they remain conscious during communication, but get feelings, hints and visions from the deceased communicator. They might receive the letter of a name, or be shown an object that is a

metaphor for some important facet of the sitter's relationship with the spirit; communication through this type of medium is often based in symbols and impressions. Another type of non-trance mental mediumship is that where conscious control of just part of the body is relinquished, allowing communicators to take control – the most well-known example of this is the Ouija Board. Another similar method is what is known as automatic writing, where the medium relinquishes conscious control of their writing arm to the communicating personality.

Scientists and skeptics tend to dismiss mediumship out of hand as not being worthy of investigation and, to be fair, there are a few good reasons for that sentiment. Mediumship is an area that has had, throughout its history, more than its fair share of charlatans and con men. When people lose loved ones, they are often left emotionally devastated, and will give anything to feel connected to their lost family members and friends one more time – and are therefore vulnerable to being exploited by dubious characters.

Fake physical mediums lean heavily on the techniques of stage magicians, and also often on a requirement of the 'spirits' to have a dark room before they will manifest their powers. The high number of fraudulent physical mediums, and the need for manifestations to occur in an environment not conducive to observation and scientific testing, has meant that very little hard evidence has been gathered on physical mediums – and what evidence has been collected, is often simply the uncovering of fraudulent techniques. That is not to say there aren't some very interesting cases of physical mediumship that remain a mystery (see, for example, the Icelandic medium Indridi Indridason[xciii]), but for the purposes of gathering strong evidence for the survival of consciousness we will concentrate in this essay on mental mediums.

As such, it's worth being aware of the techniques used by fake mental mediums. One of the most prominent is 'cold reading', or 'fishing': the medium starts with vague, educated guesses and then focuses on only the positive responses from the sitter, becoming more specific as the sitter continues to 'bite' on the successes and offer useful feedback. Fake mediums also use what is termed the 'Forer Effect' to their advantage. This is the tendency for people to ascribe a personal connection to vague, very general statements that apply to most people (also known as 'Barnum statements', in reference to a quote by the famous entertainment businessman P.T. Barnum: "we've got something for everyone"). Statements

like “you tend to be critical of yourself” and “you pride yourself as an independent thinker” feel personal, but actually describe most people.

Fake mediums also employ techniques of stage magicians and mentalists in order to achieve amazing effects, such as ‘muscle reading’. Muscle reading takes advantage of the ideomotor effect, where very slight involuntary reactions to questions can be picked up through physical contact, often by holding a person’s hand or wrist. And ‘hot reading’ is the willful collection of information about the sitter prior to meeting with them. Fake mediums might search through obituaries, town records, social media accounts and so on for specific information that they can later ‘miraculously’ pull out of thin air at the sitting.

The infiltration of mediumship by frauds and con men has meant that to pursue scientific research in the field, and attempt to publish papers on mediumship experiments, seems often to be taking the short route to professional suicide. However, there have been individuals and groups over the years who, intrigued by the evidence – like those scientists who saw something curious in reports of anomalous meteor sounds – have taken the bit between the teeth and looked at the subject in a scientific manner.

One group that conducted detailed, skeptical investigation of mediums – for many decades, starting in the late 19th century – was the Society for Psychical Research (S.P.R.), who as we have already seen also carried out research into ‘crisis apparitions’ at the time of death. The S.P.R. has included in its ranks some of the finest scientists, academics and public figures of their time, along with plenty of skilled investigators who in many instances had an understanding of magic tricks and the techniques of fake mediums.

While, through their skills, they certainly outed their share of frauds, the S.P.R.’s investigators also uncovered a number of mediums who consistently communicated information that was highly suggestive to them of the survival of consciousness. One of those mediums is now considered as perhaps the most tested of all time, and possibly offers the most substantial collection of evidence for the survival of consciousness collected thus far: Leonora Piper.

The prodigious talents of Leonora Piper were first uncovered by Professor William James of Harvard University, one of the most highly regarded thinkers of the 19th century (his texts *Principles of Psychology* and *The Varieties of Religious Experience* are classics in their respective fields). James had an interest – if a rather skeptical one – in the claims made by

Spiritualists of communication with the dead, so when his wife's family told him about an extraordinary trance medium they had visited in Boston, he thought it might be worthwhile to investigate further.

Ever the skeptic, James was careful to ensure that Mrs. Piper did not know who he was when arranging the visit, and was wary of assisting the medium through any cold reading attempts, taking "particular pains" to not give Piper's 'control' personality any "help over his difficulties and to ask no leading questions." And yet the entranced Mrs. Piper consistently produced extremely accurate private information that James found convincing. "My impression after this first visit," James later noted, "was, that [Mrs. Piper] was either possessed of supernormal powers, or knew the members of my wife's family by sight and had by some lucky coincidence become acquainted with such a multitude of their domestic circumstances as to produce the startling impression which she did." While his skeptical nature is obvious in the caveat in this initial summation, continued visits with Piper subsequently led him to "absolutely to reject the latter explanation, and to believe that she has supernormal powers":

> *I am persuaded of the medium's honesty, and of the genuineness of her trance…I now believe her to be in possession of a power as yet unexplained.*[xciv]

On the basis of William James' opinion of Leonora Piper, the S.P.R. assigned one of their toughest skeptical minds, Richard Hodgson, to the case. Hodgson had made his name with a high-profile debunking of the leader of the controversial Theosophical movement, Helena Blavatsky, as well as papers pointing out the poor observational ability and gullibility of sitters at séances. "Nearly all the professional mediums," he had scowled in one report, "are a gang of vulgar tricksters who are more or less in league with one another."[xcv] Hodgson ended up investigating Leonora Piper for almost twenty years, using detectives to shadow her and her husband, arranging sittings for others anonymously, and taking numerous other precautions, while transcribing the information produced and checking it carefully. To test whether Piper was truly in a trance, Hodgson pinched her suddenly ("sometimes rather severely"), held a lit match to her forearm, and forced her to take several deep inhalations of ammonia (another researcher poked her with needles without warning). The entranced Piper showed absolutely no reaction to these tests – though, as Hodgson rather coldly noted, she "suffered somewhat after the trance was over."

Hodgson collected thousands of pages of testimony and analysis, and reams of evidence suggesting that Leonora Piper had access to information beyond her normal senses. While it is impossible here to properly transmit the collective weight of the evidence produced during such a detailed, careful investigation over an incredibly long period of time, Hodgson's official conclusion should at least offer some idea of its effect. The scrupulous investigator, who had started his research with unbridled skepticism, was now, he said, convinced "that the chief 'communicators'…have survived the change we call death, and… have directly communicated with us…through Mrs. Piper's entranced organism."[xcvi]

The opinions of Richard Hodgson and William James on the mediumship of Leonora Piper were in no way outliers. Professor James Hyslop , another of the S.P.R.'s skeptical researchers who devoted a number of years to studying Piper, concluded that her mediumship provided evidence "that there is a future life and persistence of personal identity."[xcvii] Frederic Myers, one of the founding members of the S.P.R., said of his own sittings that they "left little doubt – no doubt – that we were in the presence of an authentic utterance from a soul beyond the tomb."[xcviii]

Leonora Piper was hardly the only focus of the S.P.R., however. They investigated many other mediums, and outed some as frauds, but also found a significant number of cases of mediumship to be evidential of the survival of consciousness. For example, another trance medium who impressed the S.P.R. was Gladys Osborne Leonard. Like Leonora Piper, Leonard allowed herself to be studied by the S.P.R. for a large portion of her life, from just prior to the First World War until after the Second World War had come to an end. And as with Mrs. Piper, the S.P.R. applied a skeptical attitude to their investigation, to the point of having detectives shadow Mrs. Leonard to determine if she was researching sitters' details.

Again, the conclusion of investigators was that Leonard possessed some sort of supernormal power. A skeptical researcher who asked for one particular set of sittings – classical scholar E.R. Dodds – was left with no rational explanation for the information received. In contemplating the summary of the sittings – of 124 pieces of information given, 95 were classified under 'right/good/fair', and only 29 as 'poor/doubtful/wrong' – he noted that "the hypotheses of fraud, rational influence from disclosed facts, telepathy from the sitter, and coincidence cannot either singly or in combination account for the results obtained." The experiment, he said, seemed to present investigators with a choice between two conclusions that were equally paradigm-shattering: either Mrs. Leonard was reading the minds of living

people and presenting the information so obtained, or she was passing on the thoughts of minds "other than that of a living person." Dodds concluded that he could see no plausible explanation that would allow his skeptical mind to escape this "staggering dilemma."[xcix]

Looking back on the many decades of research done by the S.P.R. since the late 19th century, it is quite extraordinary to note that these positive findings by diligent, skeptical researchers – as mentioned already, some of the finest minds of their time, who undertook detailed, long-term investigations of mediumship – and their larger conclusion for what it means for the survival of our consciousness beyond physical death, have simply been ignored by mainstream science. Like meteorites that didn't fit the paradigm of 18th century science, it seems 20th century science wasn't yet ready to allow the possibility that consciousness can persist beyond death.

However, despite this neglect by the orthodoxy, other modern researchers have dared to take on the yoke of investigating mediumship within a scientific framework. Dr. Emily Kelly of the University of Virginia and former hospice chaplain Dianne Arcangel undertook a study of the information given by mediums to recently bereaved persons, the results of which were published in early 2011 in the *Journal of Nervous and Mental Disorders*. Kelly and Arcangel's findings also offer evidence for the validity of mediumship.

In one experiment, Kelly and Arcangel employed nine mediums to offer readings for 40 individual sitters – two of the mediums doing six each, while the other seven mediums did four readings each (each sitter had just one reading done). The sittings were done without the actual sitter present (the researchers acted as a 'proxy' to sure a 'blind' protocol), and audio recordings of the mediums' statements were later transcribed. Each sitter was then sent six readings – the correct reading, and five 'decoy' readings drawn from those given for others in the group – but were then asked to rate each overall reading on how applicable they thought it was to them, and comment on why they chose the highest rated reading. Thirty-eight of the forty participants returned their ratings – and, amazingly, 14 of the 38 readings were correctly chosen, a number significantly above what would be expected by chance.[c] Additionally, seven other readings were ranked second, and altogether 30 of the 38 readings were ranked in the top half of the ratings. What's more, one medium in particular stood out above the others: all six of this person's readings were correctly ranked first by each sitter, at quite astronomical odds. Sitters, asked to explain why they chose the correct readings, often cited the specific, personal details that stood out. For example:

…the medium referred to "a lady that is very much, was influential in his [the deceased person's] formative years. So, whether that is mother or whether that is grandmother… She can strangle a chicken." The sitter commented that her grandmother (the deceased person's mother) "killed chickens. It freaked me out the first time I saw her do this. I cried so hard that my parents had to take me home. So the chicken strangling is a big deal…In fact I often referred to my sweet grandmother as the chicken killer."[ci]

Such exact hits on highly personal information by mediums are sometimes called 'dazzle shots'. To use an example from popular culture, for those that know the movie *Ghost*, it is when Demi Moore's character Molly is stopped in her tracks by the mention of one familiar word from Whoopi Goldberg's Oda Mae: "He says 'Ditto'." It might be only one piece of information out of many that is specific enough to get the attention of the sitter, but it is *so correct* that it stands out above everything – and it is usually something so personal and idiosyncratic that no medium would likely have been able to guess it or uncover it through investigation.

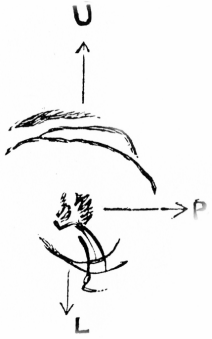
Reports of dazzle shots like the one mentioned above abound in the research literature. Trevor Hamilton, who undertook his own investigation of mediums in the wake of his son Ralph's death in a car accident, told of one such incident when sitting with a certain medium who for most part was not providing much evidential information. The medium all of a sudden noted that they were being given a mental picture of Trevor "agitated at a table, tapping on it with a penny, in the registry" – a seemingly random and obscure statement that was in fact spookily correct. "I had to sort out the legal matters to do with Ralph's death," Trevor notes. "I remember going to the registrar to prove probate and get the death certificate, and sitting outside her office staring at the little table in front of me, tapping aimlessly with a couple of pennies on the tabletop, confronted by the utter meaninglessness of it all."

Another good example is from the mediumship of Gladys Osborne Leonard. Mary White was a distraught widow who wrote to the researchers of the S.P.R., requesting a sitting, when her husband Gwyther died from stomach cancer aged just 38. During a proxy sitting – where another person sat in on behalf of Mary White, to minimize the possibility of information leakage through cold reading and so on – that was full of evidential hits, the medium referred to a piano: "You know the piano, you tap on his teeth, the one with the big white teeth?" When Mary White read the transcript of this sitting, she was amazed. "Gwyther often called

my piano ‘the animal with the big white teeth’,” she noted. In a subsequent sitting where Mary White was an anonymous guest (so that the medium was unaware of her identity), Leonard spelled out Gwyther’s pet name for his wife: ‘Biddy’. The convinced sitter noted that this particular name was very special, as it was only Gwyther that used it. He also mentioned “the house of sweet scents,” which was a specific phrase that he had invented to describe potpourri.

Leonora Piper provided Richard Hodgson with a dazzle shot during his initial sittings, when she provided highly specific personal information about a girl he knew in his home country of Australia – a lost love by the name of Jessie Tyler Dunn (discreetly referred to in Hodgson’s reports under the simple pseudonym of ‘Q’). Dunn had died in Melbourne some 8 years previous – and yet Piper correctly stated that “the second part of her first name is –sie.” Hodgson was then jolted by a description from Leonora Piper’s control personality ‘Phinuit’ that seemed to defy any rational explanation:

> *She then began to rub the right eye on the under-side, saying, “There’s a spot here. This eye (left) is brown, the other eye has a spot in it of a light colour, in the iris. This spot is straggly, of a bluish cast. It is a birth-mark. It looks as if it had been thrown on.”*
>
> *…I asked her to draw it, the result being the figure, a reproduction of which is attempted below:*



> *‘Q’ had a splash of what I should call grey (rather than blue) in the right eye, occupying the position and having very nearly the shape assigned by Phinuit. I should have drawn it as I remember it, thus:*

It is difficult to imagine how Leonora Piper could have accessed this stunning 'hit' through any normal means.

Dr. Julie Beischel – who has been investigating mediums on a full-time basis since 2003, first at the University of Arizona and subsequently at the Windbridge Institute – understands the necessity of accounting for dazzle shots when scientifically evaluating mediumship. As such, in her experimental set-up participants choose which of several readings they think is the one that is most meaningful to them. That way, she says, "if one reading contains true dazzle shots but not a lot of other correct information, that may be reflected in the raters' choices."[cii]

Dr. Beischel's experience in researching mediumship has informed numerous other aspects of her experimental process. She realized that, in order to optimize the chances of uncovering concrete evidence of the survival of consciousness, she should be testing only the best mediums. "If we wanted to study the phenomenon of high jumping, we would find some good high jumpers," Dr. Beischel points out. "We wouldn't invite some people off the street into the lab and tell them, 'go jump over that bar'. In mediumship research, we would select participants with a track (and field) record of reporting accurate information about the deceased."[ciii]

As such, Dr. Beischel and her research team have employed an extensive screening, training, and certification procedure that consists of eight steps, during which prospective mediums are firstly interviewed, and then tested to see if they can achieve a certain level of accuracy with their readings. Those that pass the testing stage are then put through a training schedule and, once they have completed all the necessary steps, they are then inducted as a 'Windbridge Certified Research Medium' (WCRM). Contrary to the widely held perception of mediums as money-hungry fraudsters, there is no payment involved for either the certified status, or for the medium's time in taking part in experiments. They give their time freely for the experiments, and Dr. Beischel makes clear that they are willing, for the purposes of science, "to attempt experimental protocols that go well beyond their comfort zones…they have a genuine and personal interest in our research questions and are willing to volunteer their time to assist in answering them."[civ]

Nevertheless, Dr. Beischel and her team still take extensive measures to protect against the possibility of fraud and unintended assistance, partitioning off every person involved in the

experiment from being able to relay information about the sitter, the deceased person they wish to be in contact with ('discarnate'), and which is the correct reading:

> *We need to eliminate all the normal explanations for how the information the medium reports could be accurate. To rule out fraud, we have to make sure the medium can't look up information about the sitter or the deceased person online or in any other way. We also need to account for cold reading… To prevent that from happening, the medium will be what's called masked or blinded to the sitter. The medium won't be able to see, hear, smell, etc., the sitter during the reading: but, as stated above, the sitter should be involved somehow in order to optimize the environment, so we'll just make sure his intention is that his discarnate communicates with the medium. Now if I as the experimenter know things about the sitter or the discarnate during a reading, I could also cue the medium… So in our design, let's also blind me to the information about the sitter and the discarnate… That just leaves the sitter. When a person reflects on the accuracy of a mediumship reading that he knows was intended for him his personality and psychology affect how he rates the statements. A person who is more laid-back and forgiving may score more of the items as accurate whereas someone more cynical and strict may only score a few as right. That phenomenon is called rater bias… To maintain blinding, the sitter won't be able to tell which reading is which… So, to account for fraud, cold reading, experimenter cueing, general statements, and rater bias, we…design an experiment in which the setting is similar to a normal mediumship reading but where the medium, the sitter, and the experimenter are all blinded.*[cv]

The results of these tightly controlled experiments were highly evidential, Dr. Beischel and her fellow researchers concluded, of "the phenomenon of anomalous information reception (AIR), the reporting of accurate and specific information about discarnates without prior knowledge about the discarnates or sitters, in the absence of any sensory feedback, and without using deceptive means."[cvi] Or, in more simple terms, as Dr. Beischel puts it: "When I applied the scientific method to the phenomenon of mediumship using optimal environments, maximum controls, and skilled participants, I was able to definitively conclude that certain mediums are able to report accurate and specific information about discarnates (the deceased) without using any normal means to acquire that information."[cvii]

One other possible explanation?

Given the careful, in-depth research on mediums by highly qualified scientists over almost 150 years, we can now say there is an abundance of evidence in favor of the conclusion that

mediums truly do communicate with the consciousness of deceased individuals. However, there is one other possible explanation: the 'super-psi' theory (also known as 'living-agent psi'). This refers to the possibility that the information being communicated by mediums is not being sent from deceased persons, but is instead received by the medium via telepathy from the minds of the living, or via other paranormal means, such as clairvoyance, or precognition.

Some might suggest that super-psi is somewhat of a *deux ex machina* for those trying to avoid accepting the evidence for what it appears to be at face value: proof of the survival of consciousness. It begs a number of questions: Why would the medium extract information about a deceased person from the mind of the sitter? How do minds 'read' each other? And, extending that, if minds can do these amazing things, then perhaps mind is made of a thing beyond the physical, and is not restricted to life in a physical body? When we begin exploring the idea of super-psi, we often end up in the same neighborhood as the survival of consciousness hypothesis anyhow.

Dr. Beischel and her fellow researchers have, however, provided somewhat of a counter to the super-psi problem. During their experiments, some mediums described to them how there were two entirely different 'feels' to performing mediumship readings versus performing psychic readings for the living. In response to this information, the researchers set up a study in which mediums were provided with the first name of a target person at the start of a reading, some of whom were living while the others were deceased, though the medium and the experimenter were blinded to this knowledge. The medium then went on to answer questions about the target personality and completed a standardized questionnaire about his/her experiences during the reading. When these were analyzed, Julie Beischel says, "a statistically significant difference was found for blinded readings for living targets versus blinded readings for deceased targets."[cviii] This gives credence to some mediums' opinion that they are not using telepathy or other 'psi' talents to acquire information about the deceased target. In short, Beischel says, "they know what psi feels like and mediumship feels different even under blinded conditions."[cix] The data from her experiments, she believes, effectively refute both the idea that mediums use normal, sensory means to find out information about the deceased, as well as the more controversial super-psi theory. "This leaves only communication with the deceased as a plausible explanation for the source of their information," Beischel concludes.

The S.P.R.'s researchers also confronted the super-psi problem, although the technique they ended up using to address it was somewhat of an ironic invention, as it was, apparently, devised by a dead person and communicated through a medium! The basic premise of what became known as the *cross-correspondences* was outlined very simply by one of the communicators: "Record the bits and when fitted they will make the whole." The plan was for a communicator on 'the other side' to begin with a coherent idea, which would then be divided into pieces – like a jigsaw puzzle – and distributed to a number of mediums scattered around the world. The pieces on their own would not make sense to each medium, or those sitting with them, but once they had been recognized as pieces of the puzzle and reassembled, the overall picture would become apparent. Also, as further proof this revealed 'picture' would be seen to relate to the personality of the deceased communicator in some way.

The main communicators in the cross correspondences claimed to be the afterlife incarnations of two of the co-founders of the S.P.R., Frederic Myers and Henry Sidgwick, and another important member of the society, Edmund Gurney. The cross correspondences were collected for some 31 years, between 1901 and 1932, and the 'puzzle pieces' often involved literary themes related to their academic interests. In total, over 50 papers were written analyzing the cross correspondences, many of those book-length, with complex analyses of how the literary puzzle pieces fit together. It's therefore almost impossible for a lay-person to grasp the intricacies of the entire body of evidence – and indeed, some experts believe that complexity makes them virtually unusable as easily accessible evidence for survival of consciousness.[cx] But, as researcher and author Alan Gauld notes in his authoritative study *Mediumship and Survival: A century of investigations*, "the super-ESP hypothesis has great difficulty in accounting for cases of the 'cross-correspondence' kind."

And finally, it is extremely important to remember that mediumship research findings do not stand alone when it comes to evidence supporting the survival of consciousness – they are instead part of a greater set that includes, as we have already seen, other convincing evidence from areas including NDEs and ELEs. When viewed in this full context, survival of consciousness seems a far more parsimonious explanation for mediumship than the "crippling complexity" of the super-psi theory,[cxi] which requires multiple modes of paranormal information transfer.

And there is one more aspect of research into mediumship that helps to establish that it is indeed interconnected with those other areas: accounts of the dying experience, as related by the dead themselves.

Crossovers between Mediumship and NDEs/ELEs

More than a decade before the publication of *Life After Life* – the 1975 book that started the public fascination with near-death experiences – another researcher, Dr. Robert Crookall, investigated the phenomenon and wrote about it in a pair of relatively obscure books: *The Supreme Adventure* (1961) and *Intimations of Immortality* (1965). Crookall cited numerous examples of what he called "pseudo-death," noting the archetypal elements that Moody would later bring to the public's attention as the NDE. What's more, however, he also compared these 'pseudo-death' stories with accounts of the dying process as related by those who claimed to have already gone through it: deceased communicators speaking through mediums. Intriguingly, Crookall found a number of the same recurring elements, despite the fact that they were recorded well before the details of NDEs became well-known.

For example, Crookall noted that, according to the deceased communicators, the newly-dead are usually met by other deceased loved ones, just as has been related by those who have undergone NDEs and ELEs. This of course may not be considered a surprising thing for a medium to say – it's probably what most people would hope for after dying. But the common elements continue and include some of the more idiosyncratic features of the NDE. For instance, Crookall noted that communicators often declare that "in the early stages of transition, they experienced a panoramic review of their past lives" – it's worth emphasizing that the words used, "panoramic review," are *the exact same* as used by a number of NDErs (and see also Moody's archetypal NDE description mentioned earlier). In one case the communicator recounted that shortly after death "the scenes of the past life" are revealed; another said that upon 'waking' his "entire life unreeled itself." Another said that after dying his thoughts "raced over the record of a whole long lifetime," while another communicator said he saw "the events of my past life pass, in a long procession, before me." One account sounds almost exactly like a typical NDE, with the dead communicator first having an out-of-body experience where he looked down upon his body and those gathered around him, before:

…the scenes of my whole life seemed to move before me like a panorama; every act seemed as though it were drawn in life size and was really present: it was all there, down to the closing scenes.[cxii]

Crookall's research also found that, just as in the case above, communicators regularly made note of the OBE component. For example, one communicator noted that he "seemed to rise up out of my body." According to another, "I was not lying in the bed, but floating in the air, a little above it. I saw the body, stretched out straight."

And communicators also described one other familiar element of the NDE: traveling through a tunnel and emerging into another realm full of light. "I saw in front of me a dark tunnel," said one, before travelling through it and then stepping "out of the tunnel into a new world." Another communicator noted that they remembered "a curious opening, as if one had passed through subterranean passages and found oneself near the mouth of a cave… The light was much stronger outside."

The common elements are compelling. For anyone familiar with the literature, these reports through mediums are startlingly similar to the accounts of NDErs – and yet Crookall collected them years before the archetype of the NDE became common knowledge. In having one anomalistic phenomenon seemingly confirm another, we might see a parallel to the 'impossible' anomaly of stones falling from the sky being confirmed by combining reports from two different sources – for example, eye-witness testimony of a fireball, and the subsequent discovery by others of strange rocks in the same locality.

Returning from death: memories of past lives

If consciousness can survive physical death – as the evidence we have so far reviewed strongly suggests – does that mean it can continue on in a new body? Incredibly, the answer to that question appears to be 'yes', based on the convincing evidence collected by researchers over the course of the past six decades.

The instigator of this modern research was Dr. Ian Stevenson, a respected psychiatrist with some 60 publications in the medical and psychiatric literature when he took on the position of Chairman of the Department of Psychiatry at the University of Virginia in 1957.[cxiii] As an extensive reader, Stevenson had become intrigued by a number of strange reports of individuals who appeared to have memories of a previous life, and thought the topic worthy of further investigation. He collected and analyzed 44 of them in a paper that was published in 1960,[cxiv] noting later that once he had pulled the cases together as a group and viewed the similarities – most notably, that "they predominantly featured young children,"[cxv] that "it just seemed inescapable to me that there must be something there…I couldn't see how they could all be faked or they could all be deception."[cxvi] Stevenson subsequently travelled to India and Ceylon (now Sri Lanka) to investigate reports in person, and uncovered 32 more cases during these trips alone.[cxvii]

As Stevenson found, a typical case of past-life memories involves a young child about two to three years old who begins telling parents or siblings about a life they led in another time and place,[cxviii] and usually stops around age seven when most seem to lose the memories (which is also the age when children typically begin losing their memories of being an infant).[cxix] These memories arise spontaneously – hypnotic regression is not involved – and the child usually describes their 'previous personality' as being an ordinary person of no particular note, rather than a well-known historical figure. What often does set their lives apart – in some 70% of the reported cases – is that they died an unnatural, often traumatic, death.[cxx]

As Dr. Stevenson explained:

> *The child usually feels a considerable pull back toward the events of that life and he frequently importunes his parents to let him return to the community where he claims that he formerly lived. If the child makes enough particular statements about the previous life, the parents (usually reluctantly) begin inquiries about their accuracy. Often, indeed usually, such attempts at verification do not occur until several years after the child*

has begun to speak of the previous life. If some verification results, members of the two families visit each other and ask the child whether he recognizes places, objects, and people of his supposed previous existence.[cxxi]

Stevenson's work attracted the attention of Chester Carlson, inventor of the Xerox machine, and with Carlson's financial support in 1967 he established the Division of Personality Studies (now the Division of Perceptual Studies, or DOPS) at the University of Virginia as a dedicated research center. He was thus able to dedicate the bulk of his time over the next four decades to investigating cases of past-life memories, until his passing in 2007. In that time, he wrote and published several books that documented his meticulously researched cases. The first of his books, published in 1966, was *Twenty Cases Suggestive of Reincarnation*. It showcased his careful research, determining exactly what children reporting past-life memories had said about their previous life, before painstakingly attempting to verify whether those statements were correct and had not been embellished or informed through some mundane information channel. Stevenson knew that such a controversial topic had to be approached in a very careful manner, so he sought evidence that was difficult to dispute. For example, he considered any statements made by subjects after they had met or been in communication with their 'past-life' families to be tainted; instead, his priority was to examine statements made before any contact was established.[cxxii] The *American Journal of Psychiatry*, in reviewing his research, was impressed enough to remark that the cases were "recorded in such full detail as to persuade the open mind that reincarnation is a tenable hypothesis to explain them."[cxxiii]

However, it should be noted that Stevenson consistently stated he wasn't attempting to prove any particular hypothesis or religious doctrine, but instead was simply documenting and examining a mystery and remained open to all explanations. *Washington Post* journalist Tom Shroder, who travelled with Stevenson on some of his research trips and documented his experience in the book *Old Souls: Compelling evidence from children who remember past lives*, said it was this aspect that attracted him to Stevenson's work in the first place: "He has never said anything like 'Believe this because I believe it.' What he *is* saying is, 'Look at what I've found. Examine it any way you want to examine it. Think of your own questions, find tests of truth that have escaped me, and if you can imagine a more reasonable explanation for all this, please let me know."[cxxiv]

After the publication of his first book, Stevenson continued traveling the world investigating hundreds more claims of past-life memories across a number of countries and cultures. He intermittently reported cases in journal papers, but from 1975 to 1983 also published four volumes of a book series titled *Cases of the Reincarnation Type*, which documented in detail the large number of cases he had collected from India, Sri Lanka, Lebanon and Turkey, and Thailand and Burma, respectively. Once again, scientific reviews of his research were exemplary; the book editor of *JAMA* (the *Journal of the American Medical Association*) wrote of the first volume that "he has painstakingly and unemotionally collected a detailed series of cases in India in which the evidence is difficult to explain on any other grounds… He has placed on record a large amount of data that cannot be ignored."[cxxv]

Other researchers were inspired by Stevenson's work to do their own research on the topic, investigating and publishing reports on other cases of past-life memories. In 1994 a study, based on 123 cases across five cultures collected by three independent researchers, replicated his results, concluding – like Dr. Stevenson – that "some children identify themselves with a person about whom they have no normal way of knowing. In these cases, the children apparently exhibit knowledge and behavior appropriate to that person."[cxxvi] By the late 1990s, the body of scientific evidence for memories of a previous life had become so substantial that even Carl Sagan, the famous scientist and skeptic, said that he thought it was a claim that merited serious study.[cxxvii]

Birthmarks and birth defects, and strange behaviors

In the course of his work collecting reports of past-life memories over several decades, Dr. Stevenson had also noted – and investigated, but not published – a curiously large subset of the cases: those in which the person reporting past-life memories was born with birthmarks or defects that matched wounds on the body of the claimed previous personality. In 1997, he published a 2268-page-long, two-volume collection detailing more than 200 of these cases, titled *Reincarnation and Biology: A Contribution to the Etiology of Birthmarks and Birth Defects* (along with a shorter, more accessible synopsis, *Where Reincarnation and Biology Intersect*).

As such cases provided corroborating physical evidence to back up the testimony of the children regarding their past-life memories, Stevenson went to great lengths to verify their details. He obtained autopsy reports, medical or police reports, and eyewitness testimony

about the wounds on the past-life personality, and in his book included numerous pictures substantiating the similarities between the birthmarks/defects and the wounds. Some notable cases include a young girl with malformed fingers who remembered a previous life as a man whose fingers were chopped off; another girl with a pale, scar-like birthmark that encircled her head who remembered the life of a man who had skull surgery; and a boy with a malformed right side of his face and ear who had past-life memories of being a man who died as a result of a shotgun blast to the right side of his face.

Furthermore, a number of the cases involved double birthmarks, and were tied to deaths of the previous personality by gunshot. In most, the size and shape of the birthmarks on the children also corresponded with the entry and exit wounds of the bullet: a small, neat mark where the bullet entered the body of the previous personality, and a larger, more irregularly shaped mark matching the location of the bullet's exit.[cxxviii]

For example, a three-year-old boy in Thailand named Chanai Choomalaiwong began saying he had been a schoolteacher named Bua Kai, and that he had been shot and killed on his way to school. He also provided the names of his parents, his wife, and his children. When Chanai was taken back to the town where he said he lived, he led the way to his house, which was discovered to be the home of an elderly couple whose son, Bua Kai Lawnak, had been a teacher. He had been murdered eight years previous (five years before Chanai was born), shot in the head as he rode his bicycle to school. The elderly couple tested Chanai, who recognized Bua Kai's belongings and one of his children (insisting that they call him 'Father').

Dr. Stevenson spoke with several of Bua Kai's family, including his widow, who remembered that the doctor who examined her husband's body had said he must have been shot from behind, because he had a small wound on the back of his head and a larger wound on his forehead. Bua Kai's wounds matched two birthmarks on Chanai's head, a small one on the back of his head, and a bigger one on the front. Overall, Dr. Stevenson published eighteen cases that involved double birthmarks matching wounds on the body of the previous personality.[cxxix]

Many children also exhibit behaviors that seem connected to their memories, and become emotional when discussing events and people from their previous life.[cxxx] For instance:

A little girl in India named Sukla Gupta was under the age of two when she began cradling a block of wood or a pillow and calling it 'Minu'. She gave a number of details about a past life, such as the name and section of a village eleven miles away. A woman there, the mother of an infant named Minu, had died six years before Sukla was born. When Sukla was five and Minu eleven, she met Minu and cried. Sukla acted maternal toward the older girl, and when Minu later fell ill, Sukla became distraught upon hearing the news and demanded to be taken to her.[cxxxi]

A large number of children also have phobias that are linked to the manner of death of the previous personality. Of the 52 cases that DOPS has on file where the previous personality drowned, 43 of the children were scared of water.[cxxxii] Dr. Stevenson examined a series of 387 cases and found that 36% of the children exhibited such fears, usually from an extremely young age, sometimes manifesting even before they had begun making claims about past life memories.[cxxxiii] They also sometimes, rather disconcertingly, acted out the way in which the previous person died, such as one child who re-enacted the suicide of the previous personality by putting a stick under his chin and pretending it was a rifle.[cxxxiv]

Many also display play behaviors consistent with their previous life, such as a young boy who spent much of his time pretending to be a shopkeeper of biscuits and soda water, which was the occupation of the previous personality. In a series of 278 cases, Dr. Stevenson found that almost a quarter of the children engaged in play related to their memories of a past life, despite it not being a part of their current life and surroundings.[cxxxv]

Recent research

In his final years, and subsequent to his passing in 2007, Dr. Stevenson's work was continued on by other researchers, perhaps most notably child psychiatrist Dr. Jim Tucker, who in 2014 became the director of DOPS. In that time, focus has moved beyond simply tracking down individual cases to also include examination of groups of cases to get a 'bigger picture' view of the phenomenon. To do so, each case of past-life memories collected by researchers is coded with regards to 200 variables and entered into a database, allowing large-scale analysis of the reports.

For instance, a strength-of-case scale – based on birthmarks/birth defects, behaviors related to the previous life, and other aspects – was applied to 799 cases.[cxxxvi] It showed that the apparent strength of cases "did not correlate with the initial attitude that the children's parents

had toward their statements, indicating that parental enthusiasm did not make the cases appear stronger than they actually were… The strength of the cases also correlated with the age that the children began talking about the previous life in a negative direction (so the children started earlier in the stronger cases), the amount of emotion that children demonstrated when discussing the memories, and the amount of facial resemblance between the children and the deceased individuals."[cxxxvii]

DOPS now has over 2500 cases of past-life memories in their files – from every continent apart from Antarctica[cxxxviii] – 1400 of which have resulted in identification of the "previous personality."[cxxxix] 400 cases involve a child with a birthmark or birth defect that corresponds with the fatal wound on the previous personality, along with another 200 in which such a mark or deformity matches a non-fatal wound.[cxl] Most of the children only ever describe one past life, and their memories are mostly from near the end of that life; 75% of the subjects mention how they died.[cxli] The average interval between the two lives (i.e.. the death of the previous personality, and birth of the child relating the memory) is 4.5 years (though the median is only seventeen months) – however, in a small number of cases the interval is much longer, sometimes more than half a century.[cxlii]

Western cases

One of the initial criticisms of Dr. Stevenson's research had been that the cases he reported were all from locations in which reincarnation was part of the religious culture. He addressed this issue in a paper in 1983 in which he documented 79 American cases – many of which occurred in families who did not have a belief in reincarnation – noting how they resembled cases from elsewhere in many ways, such as the early age at which they were reported and the effect on the child's behavior.[cxliii] In recent years DOPS has concentrated on investigating more American cases, and according to Dr. Jim Tucker researchers "can now say with certainty that this is not purely a cultural phenomenon that takes place in areas with a belief in reincarnation."[cxliv]

For instance, one of the most prominent American cases so far recorded is that of James Leininger, born in 1998 into a middle-class, Protestant Christian family in Louisiana, with his father in particular being quite opposed to the idea of reincarnation.[cxlv] At age 2, James began saying the phrase "airplane crash on fire," and also slamming his toy plane nose first into the family's coffee table. He also began having nightmares multiple times a week, kicking his

feet in the air and screaming "airplane crash on fire, little man can't get out." Not long after, his parents were able to have conversations with him where he told them his plane had crashed on fire, he'd been shot down by the Japanese, and that he flew a Corsair. When he was 28 months old, he said his plane had flown off a boat, and when his parents asked him what the name of the boat was, he said "Natoma". It turns out there was a *USS Natoma Bay* that was stationed in the Pacific during WWII. When his parents asked him if he could remember anyone else's name, he responded with "Jack Larsen." When he was 30 months old, James's father purchased the book *The Battle for Iwo Jima*. On looking in the book, James pointed at a photo and said that was where his plane was shot down.[cxlvi]

Through his own searching, James's father found that there was indeed a pilot on the *Natoma Bay* named Jack Larsen, and that he was still alive. Additionally, there was only one pilot from the ship who was lost during the Battle of Iwo Jima: a 21-year-old named James M. Huston, Jr. Huston died in exactly the manner, and location, that James claimed to remember. Additionally, James appeared to have knowledge from the past life experience that a young child would not know (e.g. that Corsairs got flat tires all the time), and was able to discuss personal details of his life with Huston's surviving sister Anne. "The child was so convincing," she said in a 2004 interview, "coming up with all these things that there's no way in the world he could know, unless there is a spiritual thing."[cxlvii]

In reviewing the case, Dr. Tucker was able to rule out mundane explanations:

> *He could not have learned from the people around him, because they knew nothing about either the ship or Huston when he began talking about them. James had made all of the documented statements by the time he was four years old, so he could not have read about them. Regardless, no published materials about James Huston are known to exist. No television program focusing on Natoma Bay or James Huston appear to have been made either.*[cxlviii]

"On the face of it," Dr. Tucker concluded, the most obvious explanation was that James "experienced a life as James Huston Jr. before having his current one."[cxlix]

Other recent American cases with evidential weight include that of Ryan Hammons, who had memories of a past life in Hollywood – not as a famous star, but as an extra. Researchers verified over 50 of Ryan's statements as matching with the previous personality, Marty Martins, despite many of them requiring archival searches to uncover.[cl] Another case, of a

little boy who remembers dying in an explosion in Vietnam, also has strong evidence to back it up. The boy gave his (unusual) surname, the state he was from, and the age he died (21). Dr. Tucker conducted a picture test with the boy when he was five years old, showing him images that were relevant to the previous life – such as a photo of the school the previous personality attended, and family photos he had obtained from the previous personality's sister – along with similar, but non-connected images as controls. Altogether, Dr. Tucker showed him eight pairs of pictures, and while he didn't make a choice on two of them, he correctly chose six from six with the others.[cli]

Other findings

Another study that made use of the DOPS database involved an analysis of 'interval memories' in past-life cases – that is, recollections by the children of events said to have occurred during the interval between the death of the previous personality and the birth of the child.[clii] It was found that interval memories were present in approximately 20% of the cases, and that children who reported interval memories, compared to those who did not, "made a greater number of statements about the previous life that were verified to be accurate, recalled more names from the previous life, had higher scores on the strength-of-case scale, and were more likely to state the names of the previous personalities and to give accurate details about their deaths."[cliii]

Furthermore, a comparison of interval memories reported in Burmese cases were compared to reports of near-death experiences (NDEs). The study found features similar to the transcendental component of Western NDEs, and significant areas of overlap with Asian NDEs (e.g. they saw themselves from outside their body, encountered a mystical being or presence, and met deceased spirits).[cliv] According to Dr. Tucker, based on this it is possible that "interval memories and NDEs could be considered parts of the same overall phenomenon, reports of an afterlife."[clv]

One case recorded by Dr. Stevenson also provides an account of a veridical out-of-body experience during the interval period. The subject of the case complained of 'seeing' her ashes being scattered, rather than buried as requested. Upon checking, it was found that the previous personality had requested that her ashes be buried under a tree at her temple, but her daughter had found the tree's root system made it impossible to dig there, so she scattered them instead.[clvi]

Based on the number of strong cases of past-life memories collected over the past 60 years by researchers, Dr. Tucker says he is "now ready to say we have good evidence that some young children have memories of a life from the past."[clvii]

> *Currently, the best explanation for the strongest cases appears to be that memories, emotions, and even physical traumas can, at least under certain circumstances, carry over from one life to a subsequent one… [T]he cases contribute to the evidence for survival of consciousness after death.*[clviii]

Conclusion

On their own, each of the four areas we have discussed offer compelling evidence for the survival of consciousness. Cumulatively, the evidence is overwhelming. People have NDEs, during which they often perceive themselves as leaving their physical body and being taken to another realm; the large number of veridical NDEs provide proof that their consciousness does indeed leave their body. People at their death-bed see deceased loved ones come to greet them and escort them to another realm; Peak-in-Darien experiences and other anomalous phenomena provide proof that their experience is real. Mediums communicate with deceased individuals and are able to produce verifiable personal information as a result. Children tell of memories of past lives (and often have birthmarks or defects related to injuries in that life), the details of which researchers have been able to verify.

Furthermore, the fact that all these evidential areas are pointing at the one, unified conclusion, the survival of consciousness beyond death – without having to rely on or necessarily reference each other at all – is evidence itself, and makes the case all the more compelling. And yet still, while each does not need the others, these areas *do* support each other: NDEs and ELEs share common elements; deceased individuals communicating through mediums tell of experiencing facets of the NDE after death; and children's past-life memories also reference similar elements. If this were a court of law relying on corroborated, multiple witness testimony, the jury would be convinced.

On the other hand, skeptical arguments must rely on individual, convoluted and often unconnected explanations for each facet; even NDEs on their own require a long list of suggestions of separate physiological and psychological causes that, as we have seen, researchers have dismissed. If we were to employ that favorite tool of skeptics, Occam's Razor, to the arguments for and against survival of consciousness, the simplest and most parsimonious solution to the evidence is that our consciousness survives the death of our body.

So why isn't it a generally accepted conclusion?

On paradigms and skeptics

In modern society, the phenomena mentioned in this essay are considered mysteries and anomalies, despite decades of investigation and analysis. But they remain mysteries only

when viewed from within the framework of materialism: the dominant scientific worldview that physical matter is all that there is. When viewed from a framework that allows consciousness to exist independently of the body, *they actually make perfect sense*, and the evidence from NDEs, ELEs, mediumship and past-life memories fit perfectly – similar to the simplicity that Copernicus's heliocentric theory brought to the strange movements of the cosmos once it was accepted. On the other side, skeptical explanations for this range of phenomena introduce a complex list of individual explanations to suit each, like Ptolemaic cycles within cycles explaining the anomalous movements of the planets within an Earth-centered cosmology.

The reality of the matter is that modern skepticism is, for the most part, a defense of the materialist paradigm, rather than an unbiased system being used to seek after the truth. That is not to say that we should disregard skeptical commentary – it is absolutely necessary in the areas explored in this essay, and when employed correctly is one of the most valuable tools we have in analyzing evidence, testing our theories and ultimately understanding the world better. But we should be very careful in understanding the difference between good skepticism and bad, as many of the 'authoritative' skeptical sources that comment on areas related to the survival of consciousness are often 'believers' in the current paradigm, motivated to defend it by any means necessary.

When, instead of critically analyzing the evidence in total, skeptics instead pull out one case – such as pointing out a fake medium, or a hoaxed NDE story – to dismiss the entire topic, we should understand that this is bad skepticism. If they 'cherry-pick' data or misrepresent it to make a point, we should understand that this is bad skepticism. If they present convoluted arguments that make little sense, just to explain away anomalous data, we should understand that this is bad skepticism. And this is exactly what has happened in skeptical arguments that have marginalized the abundant evidence for the survival of consciousness.

Doubt can be 'weaponized'. Across the corporate world, sowing seeds of doubt is now an established method of disrupting scientific evidence. When cigarette companies faced the existential crisis brought on by medical evidence that smoking caused cancer, an industry report noted that their marketing strategy needed to change. Instead of actual cigarettes, the report decided, "*doubt is our product* [emphasis added], since it is the best means of competing with the 'body of fact' that exists in the minds of the general public."[clix] Sowing

the seeds of doubt, it continued, would provide "the means of establishing a controversy," rather than allowing the facts to be accepted.

Our world is now awash in 'controversies', where reasonably established ideas – such as the overwhelming safety of vaccines, and results of carefully monitored elections – are now viewed with uncertainty, and sometimes even outright distrust, by significant portions of the population due to campaigns to sow doubts and disinformation – a strategy that author David Michaels calls "manufacturing uncertainty."[clx] He cites the case of the aspirin industry delaying FDA regulation of their product – to warn that consumption by children with viral illnesses greatly increased their risk of developing a serious illness – simply by arguing that the science establishing the link "was incomplete, uncertain and unclear," even though the medical community was virtually certain of the danger. Compare this to skeptics' framing of the evidence for survival of consciousness as being incomplete and unproved, despite the fact that nearly every researcher who has spent substantial time investigating these topics thinks otherwise.

An analysis of the tactics used in such campaigns feels like it could just as easily apply to the large body of evidence for the survival of consciousness, and the tactics used by many skeptics:

> *The principles of scientific inquiry involve testing a hypothesis by exploring uncertainty around it until there is* ***a sufficient weight of evidence to reach a reasonable conclusion*** *[emphasis added]. Proof can be much longer in coming, and consensus still longer. The product-defence industry subverts these principles, weaponizing the uncertainty inherent in the process. Its tricks include stressing dissent where little remains, cherry-picking data, reanalysing results to reach different conclusions and hiring people prepared to rig methodologies to produce funders' desired results* [clxi]

That is not to say that skeptics of the survival of consciousness are involved in knowing deception or organized campaigns against the idea; just that many of their strategies do mimic those of "product defense consultants." In this case though, the defense of the 'product' (the materialist paradigm) is often motivated mainly by a staunch belief in it.

There are numerous examples of skeptics, and well-known skeptical organizations, presenting 'authoritative' cases against the evidence for survival of consciousness beyond death which do not hold up to critical examination. For example, the 'authoritative' debunking of Leonora Piper's mediumship was written by the famous skeptic Martin

Gardner, and having his name attached to the piece alone allowed it to be cited for decades as trumping decades of research done by multiple well-credentialed investigators of the S.P.R. And yet a close examination of Gardner's essay, when compared to the original case notes, shows that he either disregarded nearly all the original research and testimony, or didn't even bother to read it in the first place.[clxii]

Resorting to unscientific explanations and logical fallacies to avoid a conclusion that disrupts the paradigm is, however, common. When a skeptic suggested that the Wold Cottage meteorite might have been thrown from a volcano, Major Edward Topham exasperatedly queried "what projectile force could throw a stone of 56 pounds in weight from any volcano upon Earth to the spot near my house [in Yorkshire] where the stone fell?"[clxiii]

When looking at the large body of evidence accumulated over many decades supporting the survival of consciousness – and the quality of those investigations – we can only conclude that skeptics of the hypothesis aren't so much at odds with the evidence, as they are with the conclusion it is pointing to.

As we will see though, it's a strange stance, given that a change of scientific worldview – to one that includes consciousness as being a fundamental part of it – really isn't that controversial, as some of the finest minds of recent times believe that is the case.

Elevating consciousness

When quantum physics changed the scientific landscape at the beginning of the 20th century, one of the pioneers of the field, Max Planck noted that he believed it also changed our entire view of reality. "I regard consciousness as fundamental," Planck revealed. "I regard matter as derivative from consciousness."

Planck was hardly alone in his thinking. The famed cosmologist Sir James Jeans said that he inclined "to the idealistic theory that consciousness is fundamental, and that the material universe is derivative from consciousness, not consciousness from the material universe." Influential physicist Freeman Dyson said that it appeared to him that "the tendency of mind to infiltrate and control matter is a law of nature." And cosmologist Paul Davies has made clear that consciousness seems to him to be much more than some simple, accidental by-product of firing neurons:

Somehow, the universe has engineered not only its own self-awareness, but its own self-comprehension. It is hard to see this astonishing property of (at least some) living organisms as an accidental and incidental by-product of physics…the fact that mind is linked into the deep workings of the cosmos in this manner suggests that there is something truly fundamental and literally cosmic in the emergence of sentience.[clxiv]

The idea that consciousness may be a fundamental, stand-alone element of reality is obviously, therefore, not an inherently 'anti-science' idea. And we already know that there have been numerous scientific 'truths' that have either been consigned to the dustbin of history entirely, or at least found to be only partially correct. Such as the scientific 'truths' that rocks do not fall from space, and that people cannot instantaneously hear meteors – and that anyone saying otherwise are frauds or suffering from psychological delusions, despite the copious amounts of corroborating testimony from believable witnesses.

Is it too much to believe that, in the early 21st century, we are laboring under the same illusion that our science is complete, and that it should not be questioned even when there is abundant evidence to the contrary? As Buckminster Fuller once warned, what we think of as 'reality' is always up for redefining. "Up to the twentieth century, reality was everything humans could touch, smell, see, and hear," Fuller pointed out. "Since the initial publication of the chart of the electromagnetic spectrum, humans have learned that what they can touch, smell, see, and hear is less than one-millionth of reality."[clxv]

Numerous alternatives to our current materialist-centered paradigm have been suggested. For example, the French polymath Jacques Vallée has pondered whether our cosmos might be more informational than physical in its fundamental construction, a model which would more easily explain a number of the paranormal events that people regularly experience.[clxvi] Alternatively, William James, in questioning the scientific 'truth' that consciousness is just a by-product of brain processes, asked if "we are entitled also to consider permissive or transmissive function."[clxvii] In this 'transmission theory', our consciousness exists independently of the brain, which acts only as a receiver. Consider, for example, one of the Mars rovers – which to a 19th century human observer might seem like a creature with its own brain that, if damaged, stops the creature from functioning correctly. But its 'thoughts' are actually being transmitted to it from another world (and entity) entirely.

And perhaps we don't even require 'new' ways of explaining the cosmos. The distinguished physicist Henry Stapp has stated that in his view, even quantum mechanics allows for "aspects of a personality" to survive physical death:

> *I do not see any compelling theoretical reason why this idea could not be reconciled with the precepts of quantum mechanics. Such an elaboration of quantum mechanics would both allow our conscious efforts to influence our own bodily actions, and also allow certain purported phenomena such as "possession," mediumship" and "reincarnation" to be reconciled with the basic precepts of contemporary physics.*
>
> *These considerations are, I think, sufficient to show that any claim that postmortem personality survival is impossible that is based solely on the belief that it is incompatible with the contemporary laws of physics is not rationally supportable. Rational science-based opinion on this question must be based on the content and quality of the empirical data, not on the presumption that such a phenomenon would be strictly incompatible with our current scientific knowledge of how nature works.*[clxviii]

Stapp's summation gets to the heart of the matter. As we have seen in this essay, we have copious amounts of data from a number of fields that point quite clearly toward survival of consciousness. We have not even considered a mass of data from other fields supporting the primacy of consciousness, such as can be found detailed in well-researched academic books like *Irreducible Mind*. But due to the materialist paradigm we live within, when we are confronted with the anomalous experiences reviewed in this essay, we are still conditioned to try and impose 'mundane' explanations upon them – even when those explanations are overly contrived and ignore the obvious answer (that they are exactly what they seem to be). As Tom Shroder asked in his book *Old Souls*, when he found himself reaching for ways to explain the vast number of convincing cases of past-life memories collected by Dr. Ian Stevenson: "Why was I so unwilling to accept the most obvious explanation, that these cases were genuine?"[clxix] Scientists of the 17th century who debunked meteorites, if given their time again, would probably ask themselves a similar question: 'the answer was obvious, why didn't I simply accept it'? The reason: we are embedded within a paradigm, and we sometimes can't help ourselves from defending that model of reality when it is being upset by anomalous evidence.

As Dr James Apjohn, Professor of Chemistry, noted in 1836 about the illogical debunkings of meteorite falls: "For a length of time the fact was altogether denied by the highest authorities in science, and the strongest evidence resisted, when adduced in support of an event which

was conceived repugnant to the laws of nature. Philosophic incredulity, though generally useful, was carried too far, and proved injurious to the progress of science."[clxx] The words of past-life memory researcher Ian Stevenson echo Apjohn's thoughts in terms of how the evidence for survival of consciousness is now also dismissed by 'the highest authorities in science': "Everything now believed by scientists is open to question, and I am always dismayed to find that many scientists accept current knowledge as forever fixed."[clxxi]

Recognizing the evidence

A number of dedicated researchers continue collecting evidence for the survival of consciousness, with new approaches and more refined experiments. For example, veridical NDEs are now being investigated in studies involving various hospitals around the world, in which patients who survive a cardiac arrest are being asked if they saw hidden 'targets' placed in the room that are only visible from near the ceiling.[clxxii]

However, while researchers continue to search for more evidence, it should now be clear that *there is currently more than enough to rationally believe that consciousness does survive death*. We have barely skimmed the surface of the literature in this essay – I suggest readers seek out the source materials and explore them at length – and yet we have seen the quantity and quality of the evidence is abundant and strong.

Experiencers themselves *know*; Pam Reynolds, after her veridical NDE, stated "I know that consciousness survives the death of the physical body because I've had that experience personally… In my opinion, what happened to me is evidence of an afterlife… Having had this NDE, I no longer fear death." Those who have spent decades investigating the phenomena and assessing the reams of evidence have almost unanimously been moved to similar conclusions. Professor Bruce Greyson, perhaps the world's foremost expert on NDEs, says that while he is always open to alternative explanations, at this point in his opinion "some form of continued consciousness after death seems to be the most plausible working model"[clxxiii] to explain the evidence. Peter and Elizabeth Fenwick, after years researching ELEs, note that "the hypothesis of extended mind manifesting at the time of death is a much more persuasive explanation for most of these experiences than coincidence or expectation."[clxxiv] Past-life memory researcher Dr. Jim Tucker says "I do think that these cases contribute, along with near-death experiences and the other things, to a good body of evidence that there are times where consciousness does survive after the body dies."[clxxv]

Professor Stephen E. Braude, in his comprehensive review of the evidence for survival of consciousness – and related skeptical explanations, including super-psi – concluded that in his opinion we can say "with some justification, that the evidence provides a reasonable basis for believing in personal postmortem survival."[clxxvi] Alan Gauld in his authoritative examination of the evidence for mediumship says that in each area that we have reviewed there are "cases which rather forcefully suggest some form of survival," and that "the super-ESP hypothesis will not suffice to explain the quantity of correct and appropriate information."[clxxvii]

And yet, orthodox science continues to largely ignore this evidence, with minimal funding and support for continued research – despite the fact that it provides answers to the greatest question facing us as humans, and a balm to the anxiety and suffering of those facing their own death or the loss of loved ones. Surely it is past time for honest appraisal of the substantial quality and quantity of evidence that has been collected by dedicated scientists, putting aside illogical fears of disrupting the scientific paradigm. Do scientists today want to be seen in future centuries as the equivalent of those who denied that meteorites were real? Do they want to be the church proverbially refusing to look through Galileo's telescope, and not expanding humanity's knowledge about the universe and human consciousness?

As Thomas Henry Huxley once said, scientists should be prepared to "sit down before fact as a little child, be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses nature leads," or else they "shall learn nothing." A huge pool of evidence for the survival of consciousness beyond death has been collected across multiple fields, by honest scientists with critical minds using careful methods, often over the course of decades with little funding and chance of reward (in fact, often in the face of scorn or hostility from skeptics and fellow scientists):

- 10-20% of people who have a brush with death report undergoing an experience in which their consciousness separates from their body – confirmed by a substantial number of 'veridical NDEs' in which they provide details which they could not have known via any normal means – and meet deceased individuals and travel to another realm.
- A majority of carers surveyed report that people, in the days and weeks before their death, undergo experiences in which they are greeted by deceased individuals and transit to and from another realm. These experiences are not caused by drugs or a

malfunctioning brain, and 'Peak-in-Darien' experiences provide evidence substantiating the reality of these visitations. Additionally, carers and family of the dying also often report experiencing anomalous events, including lights, 'crisis apparitions', and other strange phenomena at the time of death that have in a number of cases been corroborated by multiple witnesses.

- Mediums who claim to be in communication with deceased individuals have been found by scientists to be able to provide accurate information that cannot be explained through normal, everyday means.
- A collection of thousands of reports of 'past-life memories' reported by children across the globe provides numerous evidential cases where details were known about deceased individuals that the child had no means of knowing. Furthermore, in a substantial number of cases birthmarks and birth defects correspond to wounds on the body of the previous identity.

If we are seeking proof beyond reasonable doubt, we have it. A huge number of credentialed witnesses, providing details that have been found by honest, skeptical researchers to be backed by evidence, and pointing at the one conclusion. The only way not to accept the evidence is by being *unreasonable*; it requires multiple convoluted and unlikely explanations that reject *all* of the testimony of an impressive number of witnesses, motivated by an illogical desire to protect a worldview from being overturned.

The evidence is freely available, vast, of high-quality, and is all explained by one simple, parsimonious solution – if we are just willing to take the next step, move beyond the current paradigm, and accept that it clearly shows that human consciousness can survive permanent bodily death.

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