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The Classification of Death-Related Experiences:
A Novel Approach to the Spectrum of Near-Death,

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ABSTRACT

The Classification of Death-Related Experiences: A Novel Approach to the Spectrum of Near-Death, Coincidental-Death, and Empathetic-Death Events

by

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In 1866, Edmund Gurney, Frederic Myers and Frank Podmore published *Phantasms of the Living*, which included descriptions of “crisis apparitions” where someone who was dying was “seen” by someone who was unaware of this fact. Since then, the concept of Near-Death Experiences (“NDE’s”) have become an increasingly popular subject in both nonfiction works and medical research, yet little attention has been paid to crisis apparitions. Here, I argue that NDE’s and crisis apparitions—which I separate into the categories of Coincidental-Death and Empathetic-Death Experiences—contain similar phenomenological attributes. These Death-Related Experiences (“DRE’s”) thus occur along a spectrum; the empathetic relationship between the decedent and the experiencer acts as the determinative element. This definition and categorization of DRE’s is a novel concept in super normal research.

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TABLE OF CONTENTS

INTRODUCTION	1
CHAPTER 1: THE NEAR-DEATH EXPERIENCE	
1.1 Introduction	10
1.2 Incidence of NDE's in Western Populations	12
1.3 Methodological Characterizations of NDE's	16
1.4 Prevalent Characteristics of NDE's	20
1.4.1 Affective Elements	21
1.4.1.1 Peacefulness and a Cosmic Connection	21
1.4.1.2 Joyful (and Negative) Experiences	22
1.4.1.3 The Light and the Tunnel	24
1.4.2 Paranormal and Transcendental Elements	24
1.4.2.1 Out-of-Body-Experience	25
1.4.2.2 Presence of a Spatial and/or Temporal Border	28
1.4.2.3 Presence of Spirits	29
1.4.2.4 Return to the Body	30
1.4.3 Cognitive Elements	31
1.4.3.1 The Life Review	31
1.4.3.2 Distorted Sense of Time And Heightened Mental Clarity	34
1.5 Enduring Self-Transformation	35
1.6 Conclusion	37
CHAPTER 2: THE COINCIDENTAL-DEATH EXPERIENCE	
2.1 Introduction	39
2.2 Phantasms of the Living	40
2.3 Modern Coincidental-DE Accounts and Characteristics	45
2.3.1 Visual Changes in Decedent's Room at the Time of Death	46
2.3.2 Non-visual Sensory Effects in Decedent's Room at Time of Death	47

2.3.3	Presence of Spirits	48
2.4	The “Call”	49
2.5	Relationship of Coincidental-DE’r to Decedent	52
2.6	Conclusion	52
CHAPTER 3: THE EMPATHETIC-DEATH EXPERIENCE		
3.1	Introduction	55
3.2	My Personal Empathetic-DE	56
3.3	Other Features of Empathetic-DE’s	61
3.3.1	Unconscious and Conscious Awareness of Decedent’s Death	61
3.3.2	Empathetic Life in Review	63
3.3.3	Presence of Other, Often Related, Spiritual Beings	65
3.4	Relationship to the Decedent	65
3.4.1	The “Call”	65
3.5	Distressing Empathetic-DE’s	66
3.6	Conclusion	66
CHAPTER 4: MEDICAL RESEARCH INTO NDE’S— THE PHYSICALIST, MATERIALIST APPROACH		
4.1	Introduction	69
4.2	Psychopathological Conditions	70
4.3	Physiological Theories: Brain Processes Creating Consciousness	72
4.3.1	Consciousness During General Anesthesia	73
4.3.2	Consciousness During Cardiac Arrest	75
4.4	NDE Features as a Result of Neurological Impairments	79
4.4.1	Abnormal Temporal Lobe and TPJ Activity	79
4.4.2	Neurochemical Alterations	82
4.4.3	Psychotropic Substances	83
4.5	Conclusion	86

CONCLUSION	90
EPILOGUE	
E.1 Introduction	93
E.2 Frederic Myers and the Filter Theory of Consciousness	94
E.3 Breaking Through The Filter	98
E.4 Sending Out a Call	102
E.5 Back to the Hard Problem of Consciousness	103
E.6 Quantum Consciousness	104
E.6.1 Can Quantum Theory be Applied to People?	108
E.7 Conclusion	110
APPENDIX 1: Questionnaire for the Greyson NDE Scale	113
BIBLIOGRAPHY	116

LIST OF TABLES

Table 1: Phenomenological Characterizations of NDE's	19
Table 2: Features of NDEs Collected Using Greyson's (1983). NDE Scale	20
Table 3: Phenomena Perceived During Material Aspect (Veridical) of NDE	27
Table 4: A New Categorization of Death-Related Experiences	67
Table 5: Total Sum of Individual Life-Change Inventory Scores of Patients at 2-year and 8-year follow-up	78
Table 6: Lexical Similarity between NDE and Ketamine Reports	85

Introduction

In the early hours of June 11, 1972, I was asleep in my bedroom in Manila when I had a dream that determined the trajectory of my life over the ensuing fifty years. In this dream, I was “taken” by someone to the car that my father was driving. I “heard” everything that he was thinking and I “saw” through his eyes the dark, storm-drenched highway upon which he was driving. He did not know he was going to die that night. When he hit the truck that had been abandoned in the road, I accompanied him through his death process, drifting on waves of love through a tunnel that led to a bright light. At the light, I was stopped while my father went forward. I was forced to turn back at a border by a “voice” telling me that it was not my time. I woke up the next morning knowing when, where and how he died; what hospital he was taken to; what time he was pronounced dead; and that a woman in the car survived. In wondering why I would have had this bizarre experience, my ten year-old self decided that a message was being sent to me: we die when it is our time to die; where we go is a beautifully loving place; and that I was given the gift of seeing this because my life was going to become much more difficult and I needed to understand that this was the way it had to be. There is more to this story and it will be detailed in Chapter 3 of this paper, which discusses Empathetic-Death Experiences (“Empathetic-DE’s”)—my term for my non-death experience that mirrors the Near-Death Experiences (“NDE’s”) narrated by many people who have died and been resuscitated.

Over these years, I have followed the growing popular interest in NDE’s and have realized that my Empathetic-DE was not a unique phenomenon. Not only have

other people experienced Empathetic-DE's, many more have reported what I term Coincidental Death Experiences ("Coincidental-DE's), which I define as diverse anomalous incidents accompanying the final passing of another that do not include a mirroring NDE. At the same time, I have been somewhat perplexed at the way these death-related experiences were being studied by the medical community, which focuses only on NDE's, and even then almost exclusively on neurophysiological or psychopathological causes in the brain of the person undergoing the NDE. It is clear to me that any explanations of NDE's should be capable of including Empathetic-DE's and Coincidental-DE's. Yet these other experiences are almost universally disregarded by medical research. Hence the genesis of this thesis.

This paper is an exercise in thinking about the phenomenology of Death-Related Experiences.¹ The term Death-Related Experiences ("DRE's") here designates the broad range of anomalous events or perceptions experienced by people who are either undergoing a NDE, or who have some timely psi awareness of the death of another. That is, all DRE's exhibit a conscious awareness of an inexplicable event accompanying a death. DRE's may happen to a person undergoing either the process of dying or in imminent fear of death—that is, experiencing a NDE—as well as those others who are not in danger of dying yet experience unusual phenomena associated with the final passing of another person. I divide this latter set of experiences into the categories of Coincidental-DE's and Empathetic-DE's. Previous studies have not distinguished different categories, treating each DRE characteristic as an isolated type of event, and

¹ By phenomenology, I mean "the study of structures of consciousness as experienced from the first-person point of view. The central structure of an experience is its intentionality, its being directed toward something, as it is an experience of or about some object."
<https://plato.stanford.edu/entries/phenomenology/>

thus preventing comparisons. My categorization is novel and I believe that it will provide a helpful framework for viewing the differences and similarities in between different types of DRE's.

All of these DRE's fall into what Jeffrey Kripal has termed "super normal;"² they just do not fit into our idea of death as a simple cessation of life processes, including consciousness. Yet they occur often enough that we have to begin thinking of them as a form of ordinary, of something that we should not be quite so surprised about—a 'new normal.' However, even considering the possibility of a new normal requires swimming upstream against the current field of DRE research, which seems to have become significantly entangled with a traditional, Cartesian methodology that views the mind as a self-generative, cognitive product of an enclosed brain. In medical research, only NDE's have been considered as a subject of valid scientific inquiry; perhaps because the NDE seems to take place in the sealed system of a single brain. Unsurprisingly, this restriction leads to the problem of 'normal' consciousness versus those suggested by these bizarre super normal events, and the only way for the cause-leads-to-result Newtonian, scientific paradigm to work in these super normal cases is to assume that something is wrong with the brain. Thus, medical studies of NDE's are focused on a neurophysiological model that views NDE's as products of neurological impairments, and hence to try to artificially create conditions of brain dysfunction during research.

The field thus seems to be almost irreversibly enmeshed in a circular discourse that only considers a small segment of DRE's that are then examined through a narrow,

² Jeffrey J. Kripal, "Introduction: Reimagining the Super in the Study of Religion," in *Religion: Super Religion*, ed. Jeffrey J. Kripal (Farmington Hills, MI: Macmillan Reference USA, 2017), xv-xlvi, xvi.

single prism lens. In this paper, I suggest that a way to break through this scientific deadlock—to find a way to shift the discussion and analysis outside of its silo—is to shift the locus of investigation. Rather than studying DRE features as isolated and self-defining physical phenomena, restructure the method to locate the phenomenology within the first person experience. That is, who is having the experience vis-à-vis the object undergoing the process of death. I believe that in so doing, what we discover is that DRE's appear to be part of a spectrum of phenomena that appear to someone who dies but is revived, as well as those who are observers—yet the experiencers of their own narrative—in the final deaths of others. This method allows us to see above the tree line and can actually do some comparative analysis. We may even be able to locate a single theory that is multifaceted enough to encompass the DRE spectrum.

My methodology focuses on the narrative of the experiencer, which, limited as it is, might be the only way we can attempt to understand these ineffable, super normal events. This opinion is contrary to many medical researchers who “have pointed out that anecdotes are often a flawed source of evidence for the ability of consciousness to function apart from the brain” because not all narratives result from a brain that is considered “dead.”³ This reasoning seems absolutely backwards to me; it is *because* not all narratives emerge from dead brains that we must consider narrative as the credible data set regarding DRE's, including NDE's. A paradigm that cannot account for most of the evidence is a paradigm in need of revision.

³ Janice Miner Holden, “Veridical Perception in Near-Death Experiences,” in *The Handbook of Near-Death Experiences: Thirty Years of Investigation*, eds. Janice Miner Holden, Bruce Greyson, and Debbie James (Santa Barbara: Praeger Publishers, 2009), 185-211, 196.

Consequently, my methodology is dependent upon the narrative of the experiencers; it is an emic approach. Critical to this method, we must acknowledge that the experience is “real” to the narrator and that the narrative is a culturally-dependent attempt to integrate the event within oneself and perhaps to share it with others. In this scenario, doubting the narrative as “unfactual” is an irrelevant blind alley because DRE research is essentially about the philosophy of mind and consciousness; first-person narratives are our only glimpse of how we consciously explain our experiences. And the process of narrative, whether directed towards others or even unconsciously to ourselves in the process of constructing the narrative, is the process of creating human consciousness through the self-evaluation of experience.⁴ Thus, lying below the surface of every investigation—whether it is admitted to or not—is the question of the source of consciousness. Do the physical and cognitive processes of the enclosed brain create human consciousness? Or not? This is, of course, the “Hard Problem of Consciousness,” which philosopher David Chalmers has defined as the simple question of “why and how do physical processes in the brain give rise to conscious experience?”⁵

I believe that DRE narratives are important for another reason. If viewed as tales incorporating sacred elements, they find a way to resonate with contemporaneous spiritual culture. That is, in order to establish veracity in their retelling, they must appear

⁴ Apparently, even Neanderthals were capable of language and thus of narrative construction, perhaps the beginning of “human” consciousness. A recent study reconstructed “sound power transmission through the outer and middle ear and calculated the occupied bandwidth in Neanderthals. . . . [concluding] that the occupied bandwidth of Neanderthals was similar to extant humans, implying that Neanderthals evolved the auditory capacities to support a vocal communication system as efficient as modern human speech.” Mercedes Conde-Valverde, *et al.* “Neanderthals and *Homo sapiens* had similar auditory and speech capacities.” *Nature Ecology Evolution*, 2021. <https://doi.org/10.1038/s41559-021-01391-6>

⁵ David Chalmers, “The Meta-Problem of Consciousness.” *Journal of Consciousness Studies*, 25:9-10 (2018), 6-61, 6.

“real” and must link to widely-understood cultural symbols. It is through this cultural discourse that people make sense of anomalous experiences and, consequently, it is the most credible form of inquiry into DRE’s. I believe that Markus Davidsen’s work on supernatural fiction provides a bridge between an experience and its cultural acceptance and is thus important to understanding why DRE narratives should be the critical aspect of research. While I do not attempt to relate Davidsen’s theory to specific DRE accounts in this paper, I am providing some background as consideration.

In brief, Davidsen argues that, in order to afford a religious use, a narrative incorporating super natural agents “must also, to some extent, construct an aura of factuality around these supernatural agents.”⁶ This credibility is instilled through the use of “veracity mechanisms,” which ground the actors (or observers) in a way that is recognizable to both the narrator and the shared audience.⁷ In order for a narrative to be considered religious, the spiritual actor(s) must be grounded in a form that is understandable to both the narrator and the audience. Moreover,

The general consensus in the field is that religious narratives are characterised by the presence of supernatural agents with whom humans can interact, and by the texts’ construction of a sense of factuality and referentiality around these supernatural agents. Religious narratives tell of human interaction with supernatural agents and invite their audiences to participate in the interaction with these supernatural agents in their own world. In other words: religious narratives are narratives that afford and promote religious use.⁸

Davidsen distinguishes between two forms of veracity mechanisms. The first one, evidence mechanisms, present “the supernatural as evidently real within the story-

⁶ Markus A. Davidsen, “The Religious Affordance of Fiction: A Semiotic Approach,” *Religion*, 46:4 (2006), 521–549, 521.

⁷ Davidsen, “The Religious Affordance of Fiction,” 524.

⁸ Davidsen, “The Religious Affordance of Fiction,” 523.

world.” It includes such devices as matter-of-factness, whereby we tend to impute factuality even to fictional events,⁹ and the teacher discourse, where comes into play when “authoritative teacher figures instruct less knowledgeable characters – with whom the reader is invited to identify – about supernatural matters.”¹⁰ The second type of veracity device is anchoring mechanisms, such as author-narrator conflation, in which “the reader becomes convinced that the author and the narrator are in fact one and the same, [and] approach[es] the text instead in a referential mode.”¹¹ Working together, the effect of the veracity mechanisms is magnified and the resulting audience interpretation is that the narrative is a credible story.¹² What might have appeared as fictional may now be seen as fact.

Adopting Davidsen’s theory to DRE’s, I suggest that DRE narratives may be considered as super natural tales, containing unearthly entities with whom human beings interact. The common traits located in the narratives lend to a matter-of-factness, and the teacher discourse is expressly provided by spiritual presences or the “voice” at the light at the end of the tunnel. However, unlike Davidsen’s examples in which supernatural fiction is intentionally created and imbued with veracity mechanisms, DRE narratives are unintentional. The narrator is not the author; the DRE “happens” to the narrator. The

⁹ “Studies “show that we process narratives along two cognitive routes, and that the results of these two different processes can be in conflict within each other. The ‘fast’ cognitive circuit, which is unconscious and tied to emotional reactions, does not discriminate between fictional and non-fictional stimuli, but reacts to fictional narratives in the same way as to other stimuli. It is because of this circuit that we can empathise with the characters in a novel and be scared of monsters on the screen. Above this gut-processing we also have a ‘slow’ and conscious cognitive circuit, which is able to label a given narrative as ‘just fiction’. The slow circuit does not always succeed in trumping the fast one, however, and that is why readers and viewers who have been deeply immersed in a narrative can find it difficult to shed off the gut-feeling of reality, even when they know that the narrative is fictional.” Davidsen, “The Religious Affordance of Fiction,” 532.

¹⁰ Davidsen, “The Religious Affordance of Fiction,” 532

¹¹ Davidsen, “The Religious Affordance of Fiction,” 536.

¹² Davidsen, “The Religious Affordance of Fiction,” 530.

narrative creates religious affordance even if the narrator has no apparent desire to do so. In the vast majority of DRE accounts, what was a strange event suddenly assumes spiritual or religious significance. Unfortunately, I suspect that it is this very effect of religious affordance that renders DRE narratives as suspicious in the eyes of many medical researchers. A report containing super normal elements falls either the realm of theology or into the category of brain disease.

Against this hermeneutic of suspicion, this thesis views DRE's as credible phenomena entangled within spaces of first-person consciousness with narrative as the only viable means of accessing and classifying evidence. I argue that it is necessary to create a new method of characterizing DRE traits that would permit comparisons among different types of DRE's. The spectrum of traits demonstrated within the categories, combined with the apparent inability of neurological studies to account for NDE characteristics, suggest that even NDE's are not internally produced by an enclosed brain in a dying body. The similarities among the three categories suggest that Coincidental-DE's and Empathetic-DE's are generally dependent upon the emotional relationships between those dying and those experiencing the DRE. Even in NDE's, empathy is an element in cases where the narrator has a veridical out-of-body experience and "sees" family members. Empathy, however, can only be evaluated through narrative, not through machines.

The first three chapters of this thesis defines and explains my categorization of NDE's, Coincidental-DE's and Empathetic-DE's. In Chapter Four, I examine the medical, neurophysiological theories behind NDE's. The Conclusion will discuss the usefulness of this new categorization method, as well as the importance of a narrative

methodology, to the current discourse surrounding NDE's. It will also emphasize the inability of medical research to account for Coincidental-DE's and Empathetic-DE's. I also include an Epilogue, which is speculative: As a result of defining and categorizing DRE traits, I hypothesize that all these experiences are contained within a spectrum that is dependent upon levels of consciousness accessible by the human brain, yet not reliant upon purely internal, physical brain processes. The Epilogue will discuss Frederic Myer's filter theory, suggest that "breakthroughs" are accessed through the right hemisphere of the brain, and suggest that a concept of nonlocal consciousness could account for all manifestations of DRE's.

Chapter 1: The Near-Death Experience

1.1 Introduction

Near-Death Experiences are super normal events, generally perceived as out-of-body journeys (“OBE’s), that are narrated by people who have clinically died and been revived as well as those who have been in imminent fear of death. One of these two situations must be present in order for a narrative to be regarded as a NDE, but not everyone who experiences one of these conditions will report a NDE. The only evidence of NDE’s consists of oral or written narratives; NDE’s cannot be measured or perceived in any other manner. Narratives, however, by definition cannot capture one of the most common features of a NDE—the ineffability that causes it to resonate so deeply and for so long in those who have experienced the journey. Consequently, any attempt to share NDE characteristics is necessarily incomplete and, in its own way, reductionist. But narrative is the most powerful reduction of experience available to us, as humans, in our attempts to communicate the incommunicable.

Reports of NDE’s have emerged from almost every culture and go back centuries.¹³ In *The Republic*, Plato writes of Er, a soldier who died in battle, returning to life twelve days later while on his funeral pyre with a story of a journey to the heavens, the cosmological arrangement of the astral plane, and reincarnation.¹⁴ The first modern description of a NDE was written by Albert von St. Gallen Heim (1849-1937), a Swiss

¹³ Pim van Lommel, *Consciousness Beyond Life: The Science of the Near-Death Experience*, (New York: Harper Collins, 2010), 11.

¹⁴ Er’s story was of a journey to a place of judgement, from where people were sent to either heaven or hell; a visit to a field where they met other souls; a further journey to a bright rainbow of light, which was the belt of Heaven and where they learned how their actions in this life would affect their lots in the next. Plato, *Plato’s Republic*, trans. G. M. A. Grube, (Indianapolis: Hackett Pub. Co., 1979), 10.614–10.621

geologist who conducted research on the structure of mountain masses in the Alps. On February 26, 1892, Heim presented his findings on a study of survivors of falls in the Alps to the Uto Section of the Swiss Alpine Club. His research question was: “What did the victim experience in the last seconds of his life?”¹⁵ To this day, his narrative summary remains to this day as one of the most eloquent descriptions of a NDE.

In nearly 95 percent of the victims¹⁶ there occurred, independent of the degree of their education, thoroughly similar phenomena, experienced with only slight differences. In practically all individuals who faced death through accidental falls, a similar mental state developed. It represented quite a different state than that experienced in the face of less suddenly occurring mortal dangers. It may be briefly characterized in the following way: no grief was felt, nor was there paralyzing fright of the sort that can happen in instances of lesser danger (e.g. outbreak of fire). There was no anxiety, no trace of despair, no pain; but rather calm seriousness, profound acceptance, and a dominant mental quickness and sense of surety. Mental activity became enormous, rising to a hundred-fold velocity or intensity. The relationships of events and their probable outcomes were overviewed with objective clarity. No confusion entered at all. Time became greatly expanded. The individual acted with lightning-quickness in accord with accurate judgment of his situation. In many cases there followed a sudden review of the individual's entire past; and finally the person falling often heard beautiful music and fell in a superbly blue heaven containing roseate cloudlets. Then consciousness was painlessly extinguished, usually at the moment of impact, and the impact was, at the most, heard but never painfully felt. Apparently hearing is the last of the senses to be extinguished.¹⁷

Heim emphasizes two aspects shared by Near-Death Experiencers (“NDEr’s”). The first feature is the utter absence of pain until the NDE is over and the subject regains “normal” consciousness. The second is the clarity and speed of mental activity that permits the subject to “save themselves through astonishingly rapid, goal-directed grasps in complicated situations.”¹⁸

¹⁵ Russell Noyes and Roy Kletti, “The Experience of Dying From Falls.” *OMEGA - Journal of Death and Dying* 3, no. 1 (April 1972): 45–52. <https://doi.org/10.2190/96XL-RQE6-DDXR-DUD5>.

¹⁶ Heim does not note how many survivors he interviewed, which included those wounded in war, masons and others who had fallen from scaffolds, survivors of a railway disaster, and numerous other climbers. Noyes and Kletti, “The Experience of Dying From Falls,” 46.

¹⁷ Noyes and Kletti, “The Experience of Dying From Falls,” 46–47.

¹⁸ Noyes and Kletti, “The Experience of Dying From Falls,” 47.

Heim related to his own experience, which had occurred twenty years previously when he slipped over a crag and fell about sixty-six feet. He describes the voluminous stream of logical thoughts that accompanied the fall that, even as he realized that he was most likely going to die, created a plan for survival if he did not.

Then I saw my whole past life take place in many images, as though on a stage at some distance from me. I saw myself as the chief character in the performance. Everything was transfigured as though by a heavenly light and everything was beautiful without grief, without anxiety, and without pain. The memory of very tragic experiences I had had was clear but not saddening. I felt no conflict or strife; conflict had been transmuted into love. Elevated and harmonious thoughts dominated and united the individual images, and like magnificent music a divine calm swept through my soul. I became ever more surrounded by a splendid blue heaven with delicate roseate and violet cloudlets. I swept into it painlessly and softly and I saw that now I was falling freely through the air and that under me a snow field lay waiting. Objective observations, thoughts, and subjective feelings were simultaneous. Then I heard a dull thud and my fall was over.¹⁹

Heim's pioneering account of NDE's, however, seems to have been forgotten in the ensuing years, perhaps due to the rise of Spiritualism and the popular interest in direct communication with spirits. It was not until Raymond Moody wrote *Life After Life* in 1976, detailing fifteen different phenomenological elements that are found in NDE's, that they became the subject of avid popular fascination. Since then, various methodologies for defining the incidence of NDE's as well as the intensity and commonality of their characteristics have been developed. The next section will review the reported, as well as the suspected, incidence of NDE's in western populations. The following section will then discuss differences in the methodologies as they relate to the various features that are considered as constituting a NDE.

1.2 Incidence of NDE's in Western Populations

¹⁹ Noyes and Kletti, "The Experience of Dying From Falls," 50.

The most recent data suggests that NDE's occur to 10% to 20% of people who have come close to death worldwide, and that approximately 3% of Americans have reported NDE's.^{20,21} These numbers do not measure how many characteristics of NDE's are present in any given account, nor do they suggest the intensity levels of any of the perceived events. While ethnicity of NDE's has not been examined, NDE's do not appear to be related to the age or the gender of the experiencer.²²

Nevertheless, the reported experiences of children are particularly interesting; some researchers believe that their accounts may be more "reliable" as they would presumably be less exposed to "cultural" (i.e., religious) influence.²³ The researchers thus appear to be suggesting that cultural influences play a lesser role in both a child's recollection and narrative account of the experience than they do with adults. This hypothesis does not seem to be correct as many children's accounts do seem to include narrative elements that reflect their conceptions of the world rather than religious iconography. For example, seven-year-old Jamie witnessed Jesus as "wearing a red hat and having a round belly like Santa Claus [and also saw] people waiting to be born—neither of which corresponded in any way to what she had been taught in Sunday school."²⁴ Not knowing what Jamie previously thought of God—whether as a fearsome

²⁰ Bruce Greyson, "Western Scientific Approaches to Near-Death Experiences," *Humanities (Basel)* 4.4 (2015): 775–796. While the content of NDE's, and the likelihood of reporting one, vary with culture, the "near-death phenomenology is invariant across cultures." 775.

²¹ Dean Mobbs and Caroline Watt. "There Is Nothing Paranormal About Near-Death Experiences: How Neuroscience Can Explain Seeing Bright Lights, Meeting the Dead, or Being Convinced You Are One of Them." *Trends in Cognitive Sciences* 15.10 (2011): 447–449.

²² Cherie Sutherland, "Trailing Clouds of Glory: The Near-Death Experience of Western Children and Teens" in *The Handbook of Near-Death Experiences*, eds. Janice Miner Holden, Bruce Greyson, and Debbie James (Santa Barbara, CA: Praeger, 2009), 87-107, 89.

²³ Harvey Irwin, "The Near-Death Experience in Childhood." *Australian Parapsychological Review*, Vol 14 (1989): 7-11.

²⁴ Sutherland, "Trailing Clouds of Glory," 91.

or a benevolent Being—it is possible to infer that Jamie believed the being she met was the warmest and kindest person she could imagine. (I think it makes perfect sense that a seven-year-old would perceive a beneficent and loving supernatural being as Santa Claus, who is also somewhat “supernatural.”)

The similarities between the accounts of children and adults indicates that near-death phenomena are not limited by “the apparent barrier of age, developmental reasoning, and lack of formal language skills.”²⁵ A nine-month-old boy who suffered a full cardiopulmonary arrest required over 40 minutes of resuscitation and was comatose for over three months. At the age of four, “without any warning or previous reference,” he told his parents a story about “when he died.”²⁶ Features included an OBE, a dark tunnel, a bright golden light, supernatural beings and the journey back to his body.

Interestingly, while out-of-body, Mark saw things that could subsequently be verified. He observed the doctors and nurses working on him and he watched his grandmother wandering through the hospital corridors looking for his mother. As Mark’s mother said, commenting on the cynicism she faced when talking about Mark’s experience, “How can you not believe him when the things he said had happened?”²⁷

The ability of an infant to experience *and* recall such phenomena suggests that there is some fundamental mechanism present at birth that permits such experiences and its memory regardless of their stage of brain development or maturation.²⁸ Children’s brains are remarkably different from those of adults—in size, basic architecture, neuronal communications, etc.—yet children consistently report the same experiential content reported by adults undergoing NDE’s. However, this basic fact has not been considered

²⁵Sutherland, “Trailing Clouds of Glory,” 93.

²⁶ Sutherland, “Trailing Clouds of Glory,” 93.

²⁷ Sutherland, “Trailing Clouds of Glory,” 93.

²⁸ Fenwick, Peter and Elizabeth Fenwick, *The Truth in the Light: An Investigation of Over 300 Near-Death Experiences* (London: Headline, 1995).

in neuroscientific research on NDE's. The studies have been almost exclusively focused on adult patients that are either undergoing cardiac arrest and revival in a hospital setting or have undergone electrical stimulation of brain lobes or been given psychoactive substances in an attempt to induce NDE-like features in a controlled setting. Such studies are the subject of Chapter 4, which discusses neurobiological and physical reductionist explanations to the phenomenological experiences of NDEr's.

It is not unusual for people who experience DRE's to have additional ones at a later time. Various explanations have been proposed for this. James Lake suggests the possibility of an evolutionary genetic predisposition to NDE's that may "be conceptualized as a specialized cognitive phenotype that can be described as a multi-dimensional fitness landscape that remains latent until it is released in response to critical biological, psychological, socio-cultural or environmental factors or cues."²⁹ Lake further proposes that

a combination of physiological, psychological, socio-cultural and environmental factors that trigger neural mechanisms resulting in the release an NDE in contexts in which the experience somehow enhances fitness at the level of the experiencer or the population. This evolutionary-developmental model is based on the assumptions that NDEs *can take place only in those persons in whom a latent capacity for NDEs is present* and that neuroendocrinological *priming* required for activation of an NDE predisposition takes place during development.³⁰

The implications of Lake's work include an NDE predisposition as an evolutionary-dependent, specialized higher cognitive trait, the transfer of cultural inheritance memes via brain mechanisms, and the possibility of inter-brain communication of semantic

²⁹ James Lake, "The Near-Death Experience (NDE) as an Inherited Predisposition: Possible Genetic, Epigenetic, Neural and Symbolic Mechanisms." *Medical Hypotheses*, v. 126 (2019): 135-148, 141.

³⁰ Lake, "The Near-Death Experience (NDE) as an Inherited Predisposition," 141.

information.³¹ This hypothesis is dependent upon the brain evolving towards increased environmental and cultural fitness. The notion of an evolving brain and/or consciousness is an advancing theme in NDE research, although still being rejected by the majority of neuroscientists.

1.3 Methodological Characterizations of NDE's

Moody identified fifteen common elements in NDE's based on 150 anecdotal reports, although no statistics were provided. No single NDE contained all of these elements, and no single element was contained in all NDE's, so Moody narrated a composite NDE as an example:

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. After a while, he collects himself and becomes more accustomed to his odd condition. He notices that he still has a "body," but one of a very different nature and with very different powers from the physical body he has left behind. 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 of 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 for 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. Later he tries to tell others, but he has trouble doing so. In the first place, he can find no human words adequate to describe these unearthly episodes. He also finds that others scoff, so he stops

³¹ This area of research links into the asymmetrical evolution of the brain hemispheres as a result of cultural and evolutionary fitness changes as proposed by Dr. Iain McGilchrist in his important work, *The Master and His Emissary: The Divided Brain and the Making of the Western World* (New Haven: Yale University Press, 2009). McGilchrist's arguments are further discussed in the Epilogue to this paper.

telling other people. Still, the experience affects his life profoundly, especially his views about death and its relationship to life.³²

Life After Life sold over fourteen million copies worldwide and resulted in several sequels.³³ It also initiated a wide audience and a growing academic response as more people began to report NDE's and researchers began to study the phenomenon. Although Moody's example indicates a temporal sequence, consequent research did not find that NDE's assumed an invariant progression. Because of this, as well as Moody's generalized findings, standardized questionnaires were developed to more precisely assess the experiences.

The first of these standardization attempts was designed by transpersonal psychologist Kenneth Ring in 1982.³⁴ The "Weighted Core Experience Index" ("WCEI") is based on ten features gathered through interviews of 102 people and NDE literature. From this, Ring derived five NDE-stages, which he believed to constitute a "core NDE: feelings of peace, well-being and absence of pain; detachment from the physical body and moving towards an OBE; entering darkness or a tunnel; meeting a bright light; entering the light and meeting spiritual presences."³⁵ The score is weighted based on the depth of the experience. The WCEI has been criticized by neurologists Blanke, Faivre and Dieguez

³² Raymond A. Moody, *Life After Life: The Investigation of a Phenomenon—Survival of Bodily Death* (Harrisburg, Pa: Stackpole Books, 1976), 11-12.

³³ One of these sequels, *Glimpses of Eternity: an Investigation into Shared Death Experiences*, will be discussed in the third chapter of this work.

³⁴ Ring's interest in NDE's developed after an LSD trip in 1971 followed by reading *Life After Life*. "What animated me and drew me to study near-death experiences was my desire to understand the state of consciousness and the transpersonal domains that I had begun to experience when I took LSD. Thus, researching NDEs, I saw then, could marry my spiritual search with my work as a transpersonal psychologist." Kenneth Ring, "How I Came to Spend My Life among the Once Nearly Dead: Ken Ring's Story," *NeuroQuantology* 9, no. 3 (2011): 419-424, 422.

³⁵ Kenneth Ring, *Life at Death: A Scientific Investigation of the Near-Death Experience* (New York: Coward, McCann & Geoghegan, 1980).

because “it is largely based on arbitrary selected and weighted features” and appears to contain features that are rarely found in NDE’s.³⁶

Noting that the WCEI is not based on statistical analysis, psychiatrist Bruce Greyson developed the NDE Scale, which has become the most widely used methodology in NDE research.³⁷ Focusing on existing literature, Greyson identified eighty features of NDE’s that he subsequently reduced to sixteen. These items are classified into four types of NDE components, which are then weighted in terms of intensity: cognitive, affective, paranormal, and transcendental³⁸ Apart from indicating good test-retest reliability and item-score consistency,³⁹ Greyson’s NDE Scale has the additional asset of allowing a subject’s perception of the transformative effects of a NDE in their personal lives to be considered. This aspect is very often mentioned by Near-Death Experiencers (“NDE’rs”) as the most significant and long-term consequence of their experience, and is now emerging as a common area of research. (Greyson’s NDE Scale Questionnaire is replicated in Appendix 1 to this thesis.) Table 1, below, summarizes the phenomenological characterizations of Moody, Ring and Greyson.

³⁶ Olaf Blanke, Nathane Faivre, and Sebastian Dieguez, “Leaving Body and Life Behind: Out-of-Body and Near-Death Experience” in *The Neurology of Consciousness: Cognitive Neuroscience and Neuropathology*, eds. Steven Laureys, Olivia Gosseries, and Giulio Tononi (Amsterdam: Elsevier Academic Press, 2016) (2nd ed.), 323-347, 332. .

³⁷ Bruce Greyson, “The Near-Death Experience Scale: Construction, Reliability, and Validity,” *Journal of Nervous and Mental Disease* 171:6 (1983): 369-375.

³⁸ Bruce Greyson, “A Typology of Near Death Experience,” *Am. J. Psychiatry*, 142:8 (1985): 967-969.

³⁹ Blanke, Faivre and Dieguez, “Leaving Body and Life Behind,” 332.

Table 1: Phenomenological Characterizations of NDE's
(per Moody, Ring, Greyson)⁴⁰

Moody (1975)	Ring (1982)	Greyson (1983)
<p>Identified 15 common elements in NDEs based on a sample of 150 reports. No statistics were provided.</p> <ol style="list-style-type: none"> 1. Ineffability 2. Hearing oneself pronounced dead 3. Feelings of peace and quiet 4. Hearing unusual noises 5. Seeing a dark tunnel 6. Being "out of the body" 7. Meeting "spiritual beings" 8. Experiencing a bright light as a "being of light" 9. Panoramic life review 10. Experiencing a realm in which all knowledge exists 11. Experiencing cities of light 12. Experiencing a realm of bewildered spirits 13. Experiencing a "supernatural rescue" 14. Sensing a boarder or limit 15. Coming back "into the body." 	<p>Identified five stages of a "core experience," based on structured interviews and a measurement scale (WCEI: weighted core experience index) administered to 102 individuals who have been near death, 48% of whom reported a NDE. These stages tended to appear in sequence, with the earlier ones being more frequent and the latter ones indicating the "depth" of the experience.</p> <ol style="list-style-type: none"> 1. Peace and well-being, reported by 60% 2. Separation from the physical body (OBE), reported by 37% (half of whom had an autoscopic OBE) 3. Entering a tunnel-like region of darkness, reported by 25% 4. Seeing a brilliant light, reported by 16% 5. Through the light, entering another realm, reported in 10%. 	<p>Devised a typology of NDEs based on his development of the 16-item NDE scale. On the basis of cluster analysis, he arrived at one's four categories of NDEs each comprising four features.</p> <ol style="list-style-type: none"> 1. Cognitive features <ol style="list-style-type: none"> a. time distortion b. thought acceleration c. life review d. revelation 2. Affective <ol style="list-style-type: none"> a. peace b. joy c. cosmic unity d. encounter with light 3. Paranormal <ol style="list-style-type: none"> a. vivid sensory events b. apparent extrasensory perception c. precognitive visions d. OBEs 4. Transcendental <ol style="list-style-type: none"> a. sense of an "otherworldly" environment b. sense of a mystical entity c. sense of deceased/religious spirits d. sense of border/"point of no return."

Greyson's NDE scale, emphasizing the intensities of each cluster of traits, has been the most widely adopted. However, in his attempts to standardize NDE narratives, Greyson excluded certain features that did not strongly correlate with other NDE items. For example, the sense of passing through a tunnel—found in many historical and contemporary accounts as a major element of a NDE—"was not significantly correlated with any other single NDE item, nor with the other 32 items collectively ($r=.17$)."⁴¹ Although the tunnel experience may be a common part of many NDE reports, its presence does not help differentiate depth of NDE, and therefore was not included in the quantitative NDE Scale. Consequently, I suggest that this attempt at standardization

⁴⁰ Blanke, Faivre and Dieguez, "Leaving Body and Life Behind," 331.

⁴¹ Bruce Greyson, "The Near-Death Experience Scale," *Journal of Nervous & Mental Disease* Vol. 171, No. 6 (1983), 369-375, 374. The same was true for the sense that time had stopped or was meaningless, which was similarly excluded.

might unwittingly devalue the most striking phenomenological aspects of the experience as judged by the narrator. Therefore, while acknowledging the helpfulness of the clusters and the importance of the intensity of the events, in the rest of this chapter I will be examining the most commonly reported characteristics, as seen from the point of view of the actor, that is, the person undergoing the NDE.

1.4 Prevalent Characteristics of NDE's

NDE reports contain a variety of events. No two will be exactly alike because no death situation is identical to another and no two lives have shared the exact same journey. However, all NDE reports contain several of the characteristics that I review below, and I have arranged the discussion in the order of their most common appearance based on the following table.

Table 2
Features of NDEs Collected Using Greyson's (1983) NDE Scale⁴²

Elements and Features of Scale	Greyson (1983)	Greyson (2003)	Pacciolla (1995)	Schwaninger et al. (2002)
N	74	27	24	11
<i>Cognitive Elements</i>				
Altered sense of time	64%	18%	--	9%
Accelerated thought process	19%	44%	--	9%
Life Review	22%	30%	50%	9%
Sudden understanding	30%	30%	--	18%
<i>Affective Elements</i>				
Feeling of peace	77%	85%	--	100%
Surrounded with light	43%	70%	46%	63%
Feeling joy	64%	67%	--	18%
Feeling cosmic unity/	57%	52%	--	45%

⁴² Nancy L. Zingrone and Carlos S. Alvarado, "Pleasurable Western Adult Near-Death Experiences: Features, Circumstances, and Incidences," in *The Handbook of Near-Death Experiences: Thirty Years of Investigation*, eds. Janice Miner Holden, Bruce Greyson, and Debbie James (Santa Barbara, CA: Praeger, 2009), 17-40, 20.

oneness

Paranormal Elements

Out of physical body	53%	70%	--	90%
Senses more vivid than usual	38%	15%	--	54%
ESP	23%	11%	--	0%
Visions of the future	16%	7%	--	9%

Transcendental Elements

Another world	58%	63%	--	54%
Encountered Beings	26%	52%	--	72%
Mystical Being	47%	26%	--	63%
Point of No Return	26%	41%	46%	45%

1.4.1 Affective Elements

While Table 2 contains only a small sampling of NDE research, it appears that the Affective Elements are the most commonly reported characteristics. This finding seems to hold true for other NDE studies.

1.4.1.1 Peacefulness⁴³ and a Cosmic Connection⁴⁴

Ineffable feelings of peace and a cosmic connection to the universe are the most commonly reported NDE features. The experience of peace includes a sense of well-being and an absence of pain. One account described it as “a sense of exultation was accompanied by a feeling of being very close to the ‘source’ of life and love, which seemed to be one. I felt embraced by such a feeling of bliss that there are no words to describe the feeling.”⁴⁵

1.4.1.2 Joyful (and Negative) Experiences

⁴³ Peacefulness is defined as “experiencing a feeling a profound peace, well-being, calmness, pleasantness, happiness, joy, unconditional love, and/or an absence of pain.” Martial, et al., “Temporality of Features in Near-Death Experience Narratives,” “Temporality of Features in Near-Death Experience Narratives.” *Frontiers in Human Neuroscience*, 11:311, 4.

⁴⁴ Cosmic connection is defined as “a feeling of harmony or cosmic unity is defined as “experiencing a sense of harmony and/or unity with the nature and/or universe.” Martial, et al., “Temporality of Features in Near-Death Experience Narratives,” 4.

⁴⁵ Bruce Greyson, *After: A Doctor Explores What Near-Death Experiences Reveal About Life and Beyond* (New York: St. Martin’s Essentials, 2021), 149.

The sense of joy and unconditional love while traveling appears to be is a very common emotion among those whose NDE includes out of body travel. However, it is not always a pleasant experience. In what has become known as the Evergreen Study, researchers defined distressing experiences “as containing extreme fear, panic, or anger, possibly with visions of threatening or taunting demonic creatures.”⁴⁶ While many reports indicate a peaceful conclusion to an initially distressing experience, others do not. IANDS researcher Nancy Bush identifies three distinct phenomenological forms of non-peaceful NDE’s, listed here in decreasing order of reports. The first type is the sense of a loss of control is a significant aspect of NDE’s reported as “terrifying.”⁴⁷ A second sort of distressing event is more existential; a “paradoxical sensation of ceasing to exist entirely, or of being condemned to a featureless void for eternity.”⁴⁸ The third kind features graphic, hellish symbolisms and none of these converted to a peaceful resolution. In a 2000 work, Dr. Barbara Rommer suggested a fourth type of distressing NDE, one that involved “fright about the perception of an externally judged life review.”⁴⁹

I suspect that experiences that contain life in reviews may have more potential to be disturbing, particularly if the actor or narrator believes that such a review might result in a more “hellish” post-death experience. However, I concur with many other authors in that distress or discomfort may occur post-experience in that the narrator is uncomfortable sharing their story due to others’ disbelief or trivialization of what is

⁴⁶ Nancy Evans Bush, “Distressing Western Near-Death Experiences” in *The Handbook of Near-Death Experiences: Thirty Years of Investigation*, eds. Janice Miner Holden, Bruce Greyson, and Debbie James (Santa Barbara, CA: Praeger, 2009) 63-86, 67.

⁴⁷ Bush, “Distressing Western Near-Death Experiences,” 71.

⁴⁸ Barbara Rommer, *Blessing in Disguise: Another side of the Near-Death Experience* (St. Paul, MN: Llewellyn Publications, 2000).

⁴⁹ Bush, “Distressing Western Near-Death Experiences,” 72.

clearly a super normal, generally transformational experience.⁵⁰ Such distinctions in the cause of distress is another area of inquiry that has not been adequately researched in any of the categories of Death-Related Experiences. Studies comparing positive and negative NDE's are far less available than those focusing on only peaceful NDE's. Yet, it is through such comparative analysis that the psychological and cultural constructs that affect either the emotional tone of the experience or, perhaps, the tone of the *recollected* experience would be most clearly identified. In *After*, Dr. Bruce Greyson describes several distressing NDE's, two of which resolved during the event into pleasurable experiences. The third NDE has a back story. It was the result of a suicide attempt. The NDE'r felt that she was standing at the edge of a hellish pit and resolved to receive treatment for depression and drug abuse. She used the experience to commit to long-term transformation, eventually becoming a substance abuse counselor.⁵¹ Thus, even this experience might be viewed as resolving positively.

I think that positive resolutions, either within the NDE itself or as a result of it, are more common than indicated by the NDE Scale questionnaire. This leads to the suggestion that the NDE Scale should be modified to account for periods of resolution and integration that extend beyond the time lapse of the NDE itself. Longitudinal studies that allowed for a back story narrative would be particularly helpful in understanding distressing NDE's.

⁵⁰ For example, having encountered the same when I was younger and tried to discuss my experience, I held it back, sharing it only with people who I believed would understand; in some cases, I used it with friends in hospice or who had loved ones who had passed. This paper is the first time I have written about it.

⁵¹ Greyson, *After*, 142-147.

1.4.1.3 The Light⁵² and the Tunnel⁵³

While some studies have indicated a lower percentage, Table 2 suggests that traveling through a tunnel to a light is one of the more common NDE features. The travel originates with an OBE and often involves a border at the end of the tunnel.

I felt myself raising up out of my body and then looked down and saw me laying on the operating table. I heard the doctor tell the nurse that my heart had stopped beating and saw nurses hurrying around me. I then seemed to fly in the air and go into a tunnel of bright lights and beams of various other colors were bouncing off the side of each wall but I was heading really fast towards an even more bright light. I had this wonderful feeling of being free, loved and very happy. Suddenly I could see a tall man dressed all in white at the end of the tunnel and as I neared him, he raised up his right hand and I just stopped flying but I seemed to be floating now. I wanted so badly to go pass him into an opening of beautiful colors but he told me “no, it is not time now. You must go back because you have a lot to do first.” The man turned his right hand just slightly and I was flying very fast through the tunnel and I felt myself fall back into my body.⁵⁴

Entering or going through the light is another characteristic, albeit uncommon, of NDE's. Those who report entering the light generally describe a beautiful place inhabited by spiritual beings. Numerous NDE accounts suggest that once a NDE'r has been admitted into the light, they might have a choice as to whether they stay or return to their body. That is, there is not temporal or spatial border; this will be further examined in subsection 1.4.2.2, below.

1.4.2 Paranormal and Transcendental Elements

⁵² The light characteristic is defined as “seeing or feeling surrounded by a light that is white, bright, brilliant, warm and/or attractive –sometimes with a mystical and/or other-worldly origin.” Martial et al., “Temporality of Near-Death Experience Narratives,” 4.

⁵³ The tunnel feature is defined as “entering, moving down or passing through a dark tunnel.” Martial et al., “Temporality of Near-Death Experience Narratives,” 4. As earlier noted, the tunnel characteristic is not part of the Greyson NDE Scale.

⁵⁴ IANDS. <https://iands.org/ndes/nde-stories/iands-nde-accounts/639-archive-through-august-11-2003.html?highlight=WyJ0dW5uZWwiLCJ0dW5uZWxzIiwidHVubmVsaW5nIiwjI3R1bm5lbCciXQ==>

In more recent versions of the Greyson NDE Scale, Paranormal and Transcendental Elements have been combined into a single category.

1.4.2.1 Out-of-Body Experiences⁵⁵

Out-of-Body Experiences may be divided into two types, although NDE and DRE literature generally fails to distinguish them. The first is an OBE “proper,” which is to be found in every NDE or Empathetic-DE in which a person reports that they have left their body; for example, traveling through a tunnel, meeting other beings, being in a different or unworldly location. The second form of OBE is known as “veridical perceptions” and “refer to any perception—visual, auditory, kinesthetic, olfactory, and so on—that a person reports having experienced during one’s NDE and that is later corroborated as having corresponded to material consensus reality.”⁵⁶ That is, the narrative is shown to be objectively “true.” Often, veridical perceptions may involve the experiencers rising out of their bodies and viewing their bodies, commonly in an objective stance as though the body belongs to someone else. For example, one NDE’r saw her stepfather at a vending machine purchasing a candy bar. This surprised her as he was a health-food proponent and never ate candy. Her mother later confirmed the report.⁵⁷ Another story involved a patient who died during cardiac surgery and described the surgeon as “flapping his arms as if trying to fly.” He asked the surgeon, who became a bit defensive and wanted to know who had told him about this behavior; eventually, the surgeon admitted that he had let his residents start the surgery and, because he did not want to

⁵⁵ OBE is generally defined as “experiencing a sense of detachment from the physical body, a perception of floating outside one’s body and/or perceiving one’s physical body from above –sometimes moving to other places.” Martial, et al., “Temporality of Near-Death Experience Narratives,” 4.

⁵⁶ Holden, “Veridical Perception in Near-Death Experiences,” 197.

⁵⁷ Holden, “Veridical Perception in Near-Death Experiences,” 186.

touch anything in order to remain sterile, he directed the residents with his elbows. Thus, the “flying” motion.⁵⁸

One of the most cited accounts involves Pam Reynolds who was diagnosed in 1991 with a brain aneurysm. The neurosurgeon attempted a radical surgical procedure: her body temperature was lowered to sixty degrees Fahrenheit, her heartbeat and breathing ceased, her brainwaves flattened and the blood was drained from her head. Having been rendered unconscious from the anesthesia, Reynolds reported being brought to consciousness by the sound of the cranial saw, despite having molded ear plugs emitting high decibel clicks at a rate of 11 to 33 per second.⁵⁹ She left her body and, from her vantage point near the neurosurgeon’s shoulder, witnessed unexpected details such as the socket-wrench-type of the saw, the way her head was shaved, a conversation between the surgeon and the cardiologist, and a procedure being conducted in her groin area. The neurosurgeon later stated, “At that stage in the operation, nobody can observe, hear, in that state. And I find it inconceivable that your normal senses, such as hearing, let alone the fact that she had clicking modules in each ear, that there was any way to hear [what she heard] through normal auditory pathways.”⁶⁰

Veridical perceptions are viewed as more “scientific” or credible as some of the elements might be later verified. A study done by Janice Holden reviewed previous research to cull ninety-three NDE narratives involving veridical OBE’s and distinguished

⁵⁸ Bruce Greyson, “Near-Death Experiences,” in *Mind Beyond Brain: Buddhism, Science, and the Paranormal*, ed. David E. Presti (New York: Columbia University Press, 2018), 22-42, 35-36.

⁵⁹ Reynolds is a musician, and identified the sound as a “natural D tone.” The volume of the clicks “has been described as louder than a whistling teakettle and as loud as a lawn mower . . .” Holden, “Veridical Perception in Near-Death Experiences,” 192, 198.

⁶⁰ Holden, “Veridical Perception in Near-Death Experiences,” 199.

them according to the “objectiveness” of the report. Table 2, below, summarizes her findings.⁶¹

Table 3: Phenomena Perceived During Material Aspect (Veridical)
of NDE as Corroborated by:⁶²

	Experiencer Only	Others per Report of Experiencer	Objective Source(s)
Accurate	13	38	35
Some Error	0	2	4
Completely Erroneous	0	0	1

Holden does not define what constitutes “some error,” but regardless the very small percentage of “completely erroneous” with respect to an objective source—2.5%—is striking. Another intriguing report as to credible veridical perception emerges from a study by Kenneth Ring and Sharon Cooper who reported on thirty-one blind people who had NDE’s. Many of these people had been blind since birth, yet they narrated veridical visual descriptions of the relevant scenes, with some participants even including correct descriptions of the colors of items present in the rooms.⁶³

Because DRE narratives are commonly retrospective—that is, they are generally (and in the case of NDE’s, always) reported after the event has occurred—there is the potential for false memories, either from preexisting beliefs or from later embellishment. In an attempt to address this issue, some studies have tried to conduct “prospective” research, involving perceptual targets put in a location that might be seen by an NDE’r but not by others. Generally, these locations are in hospitals, either in cardiac care units

⁶¹ Holden, “Veridical Perception in Near-Death Experiences,” 197.

⁶² Holden, “Veridical Perception in Near-Death Experiences,” 199.

⁶³ Kenneth Ring and Sharon Cooper, *Mindsight: Near-Death and Out-of-Body Experiences in the Blind*, (Palo Alto: Institute of Transpersonal Psychology, 1999).

or in operating rooms. Reviewing the results of five such studies, Holden notes that “[n]o researcher has succeeded in capturing even one case of [veridical perception]” involving the placed targets.”⁶⁴ (Actually, very few of the patients even reported NDE’s, far lower than what was expected according to statistical data on the occurrence of NDE’s.⁶⁵) One explanation advanced for the omission of the targets is that of “inattentional or perceptive blindness,” which is the failure to perceive a visible but unexpected object because attention is engaged elsewhere.⁶⁶ There is, of course, an even simpler explanation for the NDE’rs failure to describe the perceptual targets: If you are dying, and you have the ability to experience all sorts of super normal things— including spiritual beings and feelings of cosmic unity—why on earth would you care about colored symbols on easels or cartoons on a computer monitor?

1.4.2.2 Presence of a Spatial and/or Temporal Border⁶⁷

The above narrative references another common feature of NDE’s, which is the presence of a border or line that the person is not permitted to cross. The border is frequently accompanied by a temporally-related message; the person often objects but is told “it is not your time,” and sent “back” their body. Margaret Helen, whose

⁶⁴ Holden, “Veridical Perception in Near-Death Experiences,” 203-209.

⁶⁵ Holden, “Veridical Perception in Near-Death Experiences,” Table 9.4, 206-208. In the five studies reviewed, the rates of NDE’s versus projected (i.e., 100%) ranged from 0 (2 studies) to 8.3% (1 study) and < 15% (1 study) with another study containing incomplete data.

⁶⁶ Pim van Lommel, “Nonlocal Consciousness: A Concept Based on Scientific Research on Near-Death Experiences During Cardiac Arrest,” *Journal of Consciousness Studies*, 20:1-2 (2013): 7-48, 19. The most famous experiment on inattentional blindness involved participants watching a video of a basketball game and being asked to count the number of passes between players. During the game, either a woman with an open umbrella or a woman in a gorilla suit would walk through the game. At the end of the video, participants were additionally asked whether anything unusual occurred during the game. Overall, 46% of the observers failed to notice either the umbrella woman or the gorilla. Daniel J Simons and Christopher F Chabris, “Gorillas in Our Midst: Sustained Inattentional Blindness for Dynamic Events,” *Perception*, 28 (1999):1059-1074.

⁶⁷ This trait is defined as “approaching a border, a point of no return and/or a barrier –sometimes without access permissions.” Martial et al., “Temporality of Near-Death Experience Narratives,” 4.

Empathetic-DE will be further discussed in Chapter 3, “accompanied” her friend as he died until she was turned back.

I encountered “the voice”: warm, soft, loving, gentle, kind, yet loud and booming, firm and commanding, who said, as I was about to go through, “Stop, stop, Margaret Helen. You must go back; you must go back now. My children need you; you have my work to do.” I sensed the presence and saw the spirit of my friend, others, all sending me back, yet filling me full of a love beyond description: forgiven and loved, but sent back!⁶⁸

Numerous NDE accounts report the same words: it is not your time and that the experiencer has something yet to accomplish on earth. Consequently, a “new sense of purpose or mission in life is often related to an experience of having been sent back, or having made a choice to return to life, in order to complete some work.”⁶⁹ This sense of purpose often frames the process of self-transformation that is frequently stated as the significant result of a NDE

1.4.2.3 Presence of Spirits⁷⁰

The encounter at the border is usually accompanied by a sense of a spiritual or transcendental presence “voicing” the directive to return. In cases where the NDE’r makes it “through to the other side,” they often report meeting a deceased person who was known to or even a family member of whom they were not aware. However, in some narratives, the experiencer may not have been aware in ‘real life’ that such a relative even existed. For example, Serena had a childhood NDE in which she met two little girls, one of whom was named Olivia. Serena’s mother was, surprisingly, very

⁶⁸ Bruce Greyson, “Case 616,” August 8, 2020.

⁶⁹ Greyson, “Western Scientific Approaches to Near-Death Experiences,” 785.

⁷⁰ An encounter with spirits is defined as “meeting persons, being, presence figures and/or an voice (e.g., deceased loved ones, sacred figures, unrecognized beings, deceased or religious spirits, mystical beings) – sometimes with whom they communicate.” .” Martial et al., “Temporality of Near-Death Experience Narratives,” 4.

moved by her account, but it was not until a few years later that Serena discovered that she had an older sister named Olivia who died before she was born.⁷¹

In Elizabeth Krohn's NDE, she followed a "glow" to a "Garden," where she found an

incredibly beautiful and elaborately ornate bench [whose] unique beauty was only surpassed by the otherworldly comfort I felt when a familiar voice welcomed me . . . The voice was that of my beloved grandfather who died a year earlier . . . I had been at services to commemorate [him] when I was struck by lightning [the event sparking Elizabeth's NDE].⁷²

Elizabeth later comes to believe that the speaker was "God using my grandfather's voice to put me at ease."⁷³ Her understanding—that the spirit did not want her to be frightened—appears to have been important in setting the emotional tone of the NDE. In every NDE report that I have read, the presence of a calm and soothing spirit, or even an invisible being, seems to be the critical factor in determining whether the experience is inherently peaceful and joyful or if it is frightening. In addition, Greyson comments that "[t]he experience in an NDE of an encounter with a loving being is often described as the most meaningful aspect of the NDE, and often forms the basis for a new or enhanced sense of spirituality."⁷⁴ The experience thus adds significantly to the transformative effects of the NDE in the experiencers' personal journeys of growth.

1.4.2.4 Return to the Body⁷⁵

⁷¹ Sutherland "Trailing Clouds of Glory," 100.

⁷² Elizabeth Krohn and Jeffrey Kripal, *Changed in a Flash: One Woman's Near-Death Experience and Why a Scholar Thinks It Empowers Us All* (Berkeley: North Atlantic Book, 2018), 24.

⁷³ Krohn and Kripal, *Changed in a Flash*, 24.

⁷⁴ Greyson, "Western Scientific Approaches to Near-Death Experiences," 785.

⁷⁵ The return to the body is defined as "experiencing a decision by oneself or others to return to one's body—often accompanied by feelings of reluctance." Martial et al., "Temporality of Near-Death Experience Narratives," 4.

As noted, many NDE'rs are reluctant to go back to their body. In most cases, it seems to be due to a desire to remain in such a peaceful and joyous environment. In other cases, it might be associated with a desire to avoid pain. In both situations, the NDE'r may tell of deep disappointment or anger. Rommel writes of "Joel," who developed gangrene in his leg due to diabetes.⁷⁶ With the pain so tremendous, doctors decided to amputate it. However, Joel "kept screaming that [he] wanted to die." During surgery, he experiences an NDE where he is told that he must go back until it is his time. Following surgery, he had a number of painful setbacks including congestive heart failure and cancer. Rehospitalized, he had two more NDE's; in each case he wished to die due to the constant pain, and at every request, he was told that it was not his time. (While classified as a distressing NDE, Joel did evince positive changes, regaining his faith in a Higher Power that he had lost during World War II and returning to temple. Again, a more nuanced view of NDE narratives might conclude that Joel's experience was inherently positive.)

The return to the body is often painful. Elizabeth Krohn tells of the Being in the Garden warning her that she will feel as though her bones were being crushed, that "this was necessary because my expanded soul was much larger than my body, and it needed to be squeezed back into my physical frame."⁷⁷

1.4.3 Cognitive Elements

1.4.3.1 The Life Review⁷⁸

⁷⁶ Barbara Rommel, <https://www.near-death.com/science/experts/barbara-rommer.html>, accessed 3-April-2021.

⁷⁷ Krohn and Kripal, *Changed in a Flash*, 32.

⁷⁸ The life review is defined as "reliving or watching some or the totality of their life history (e.g., past events, past actions)." Martial et al., "Temporality of Near-Death Experience Narratives," 4.

The life review was a substantial feature of the NDE reported by Albert Heim. It has been defined as the perception of “unusually vivid, almost instantaneous visual images of either the person’s whole life or a few selected highlights of it.”⁷⁹ Studies report life reviews in 13% to 30% of NDE’s.⁸⁰ Cognitive features, including temporal distortions, accelerated thoughts and a life review such as found in Heim’s account, are more common in NDE’s that result from accidents or sudden and unexpected events.⁸¹ An important aspect of a life review is that it plays like a movie, not as an isolated or single, brief memory of a specific event.

Life reviews are rarely found in the narratives of children or those attempting suicide. The following anecdote is noteworthy because the reporter was only fifteen-years-old.

When I was fifteen, I was living on my own in Northern Arizona, in the mountains. It was winter, and one of my buddies, Andy, had been given an old car by his dad so he could drive down the mountains to school every day. Andy would pick me up and we’d go together. The seat belt on the passenger side wasn’t working; I had tried to buckle it the previous day. On this morning, he noticed and told me that his dad had insisted everyone buckle in. When I said it wasn’t working, he reached over to try to put it in. Then we heard a grating sound and we both looked up. We had gone off the road and were hurtling towards a huge Ponderosa pine. I saw my life flash before me in an instant. But it didn’t seem like an instant, each picture hung in space as though I was looking at it for a few seconds. Then we hit the tree. The car flipped and was pancaked, and we were positioned like astronauts, looking up at the sky and buckled into our seats. Somehow Andy had managed to get my belt buckled before we went off the road. We weren’t hurt.⁸²

⁷⁹ Blanke, Faivre and Dieguez, “Leaving Body and Life Behind,” 333.

⁸⁰ Blanke, Faivre and Dieguez, “Leaving Body and Life Behind,” 333. Thirty percent appears to be a high number; most researchers report closer to 13. See, e.g., Bruce Greyson “Near-Death Experiences,” 35.

⁸¹ Greyson, “Western Scientific Approaches to Near-Death Experiences,” 776.

⁸² Conversation with Sheb Powell, 4 September, 2020. Powell says he had a similar experience of a life review during another incident where he felt he was sure to die. This occurred while on active duty in the Gulf and he did not wish to further discuss it.

While Powell's story does not contain other features of a NDE, it is representative of many accounts of NDE'rs whose experience is triggered by an imminent fear of death. In many cases, the fear of death is quite reasonable and genuine; it is the occurrence of some unexpected event—in this case, Andy successfully buckling Sheb's belt just before impact—that avoids death.

Less common, and thus not included in Greyson's, Ring's or Moody's questionnaires, are NDE'rs precognitive experiences of seeing their future life, which Ring has dubbed "a personal flashforward."⁸³ In *Changed in a Flash*, Elizabeth Krohn writes of sitting in a beautiful garden with the Being who assumed her grandfather's voice and being encouraged to ask questions in order to make a decision whether to return to earth or not. She learned that she would have a third child, a daughter, and that her marriage would fail; she also found out the George H.W. Bush would be elected and that the Cincinnati Bengals would play in the 1989 Superbowl. As she notes, the later information seems trivial, but Krohn believes that the point was to help her understand the nonlinear nature of time.⁸⁴ What she understood to be two weeks in "Heaven" was only minutes on earth.

Bill McDonald's NDE, which occurred when he was eight-years-old in 1962, contained visions of future public events as well as personal circumstances.

I saw the JFK assassination. I saw who I would date and marry and where we would be living. I saw myself in the Vietnam war—even though I did not know it as such then. I only saw the helicopters and the combat and some of the events that would take place when I would later be there in 1966 and '67. I saw my children and knew them. I clearly saw my life as it later unfolded for me through the years. I saw lots of social turmoil across this country but did not fully grasp it

⁸³ Kenneth Ring, *Heading Toward Omega: In Search of the Meaning of the Near-Death Experience* (New York: William Morrow, 1984), 183.

⁸⁴ Kohn and Kripal, *Changed in a Flash*, 28-30.

at the time until I saw the events actually happen. It was a lifetime of Déjà vu as I seemed to know what my next 50 years of life was going to be like.⁸⁵

Interestingly, children are more likely to experience personal flashforwards than life reviews; these scenes of the future often involve a choice whether to return or not and reflect the pain others would feel if they chose not to return. Lisa, recounting a NDE she had at age four, spoke of seeing both her parents and grandparents “grieving badly,” and states “I couldn’t let them go through that.”⁸⁶ This comment reflects an extraordinary amount of empathy by a young child; experiencing that level of empathy would presumably affect the development of personality characteristics, rendering empathetic identification as an easily accessible emotional response in the future. This hypothesis—that a NDE or a DRE expands empathetic qualities—has not, to my knowledge, been studied.⁸⁷

1.4.3.2 Distorted Sense of Time⁸⁸ and Heightened Mental Clarity⁸⁹

As noted above, Elizabeth Krohn insists that she was in the Garden for two weeks because she was able to interpret the movement of three celestial bodies that revolved around them.⁹⁰ However, when she returns to her burned body, she discovers that she had only been dead for approximately two minutes. This distorted sense of time is another common feature of NDE’s, particularly with regard to out-of-body experiences.

⁸⁵ Bill McDonald, “Childhood NDE—Life Experiences Shown for the Next 50 Years,” *Narrative Inquiry in Bioethics*, 10.1 (2020): 17–19, 18.

⁸⁶ Sutherland, “Trailing Clouds of Glory,” 99.

⁸⁷ As will be discussed further, empathetic identification with the decedent appears to be a crucial element of Coincidental-DE’s and Empathetic-DE’s. If empathy is advanced through a DRE, it would be interesting to correlate increased empathy following a DRE with the potential for successive DRE’s.

⁸⁸ A distorted sense of time is defined as “experiencing a change in the perception of time (e.g., slowing down, speeding up, timelessness).” Martial et al., “Temporality of Near-Death Experience Narratives,” 4.

⁸⁹ Heightened mental clarity is defined as “experiencing thoughts faster than usual. Experiencing sensations more vivid than usual, sensations with all one’s senses or a crossover of senses.” Martial et al., “Temporality of Near-Death Experience Narratives,” 4.

⁹⁰ Krohn and Kripal, *Changed in a Flash*, 28.

As Albert Heim was falling over a cliff to what he believed was certain death, his mind was rapidly and clearly outlining steps for him to take in the event he survived. Heightened clarity is also a common feature of NDE's that will be seen to stand in contrast to studies comparing NDE-like traits reported by patients under general anesthesia or subjects ingesting psychoactive substances, which will be discussed in Chapter 4.

1.5 Enduring Self-Transformation

Although not listed in the NDE Scale, one of the most apparent characteristics of a NDE is its ability to cause long-term transformation in the NDE's lives. People who have experienced a near-death event consistently report on the "realness" of its mystical and transcendental elements. In my research, I have discovered that very few NDE's—and only those who have had a distressing experience—chalk the experience up to hallucinations or to other physiological effects. As far as I can tell, the sense of authenticity is so deeply felt by experiencers that it cannot be undermined by medical research suggesting that brain changes during death can account for all the characteristics of a NDE. It is the sense of "realness," that then initiates a process of self-transformation, which is probably the longest lasting result of an NDE. These personal and/or spiritual transformations are the hallmark of a NDE. This realization is what prompted both Ring and Greyson to create weighted scales that measure the intensity of the phenomena. In fact, under Greyson's NDE Scale, the long-term transformative aspects of NDE's are their defining characteristic.

A new sense of purpose or mission in life is often related to an experience of having been sent back, or having made a choice to return to life, in order to complete

some work.”⁹¹ This is particularly true for children, for whom it must be very confusing to integrate a sense of mission received at a young age into the realities of their daily lives. My personal experience at age ten, which will be discussed in Chapter 3 on Empathetic Death Experiences, examples the sense of mission imparted to some NDE’rs. I emerged with a very clear mandate to take care of my family no matter the consequences, and a deep “knowledge” that my time of earth was not yet over as I had not yet accomplished what I was sent to do.

Greyson notes that other transformative features include

loss of a fear of death, strengthened belief in life after death, feeling specially favored by God, a new sense of purpose or mission, and heightened self-esteem . . . increased compassion and love for others; lessened concern for material gain, recognition, or status; greater desire to serve others; and increased ability to express feelings. . . greater appreciation of and zest for life, increased focus on the present, deeper religious faith or heightened spirituality, greater search for knowledge, and greater appreciation for nature . . . a greater sense of spirituality [and] a sense of spiritual transformation.⁹²

NDE’rs may not be conscious of the significance of the experienced phenomenon, particularly if the event occurred in childhood. For example, Bill McDonald, who had a NDE at age eight, related seeing two numbers—29 and 59—turning and twisting together until they resembled a “5.” Bill is unsure of the significance of twenty-nine, but shortly before his fifty-ninth birthday, he had a major heart attack while hiking in the Himalayas and fell thirty feet off a cliff, resulting in a second NDE. Five cardiac stents were placed in his heart. Bill asked his cardiologist how a physically active, vegetarian, non-smoking, non-drinking, meditation-practicing person could have suffered cardiac arrest. The response was: ““If you had not been making all those positive health decisions in your

⁹¹ Greyson, “Western Scientific Approaches to Near-Death Experiences,” 785.

⁹² Greyson, “Western Scientific Approaches to Near-Death Experiences,” 785-786.

life—diet and everything— then with your genes, I would not have been too surprised if you had died already by age 29, and not 59 as you will be soon.” This coincidence obviously hit Bill “like a ton of bricks.”⁹³ His childhood NDE appears to have unconsciously affected many of his deliberate behavioral choices in life. Thus, the transformative potential of an NDE may also be expressed unconsciously through a wide range of apparently unrelated, yet intentional actions.

1.6 Conclusion

As Tables 1 and 2 listing NDE features indicate, there are a number of common elements in NDE's: an OBE; a profound sense of joy, peace and unity with the universe; a bright light and/or tunnel; a temporal or spatial border; the presence of otherworldly spirits; a life review; a distorted sense of time; heightened senses and mental clarity; and an enduring spiritual transformation. These vary in terms of likelihood as well as intensity. Researchers define the elements of “core experiences” differently; one might include a life in review while another does not. If we are to acknowledge the power of narrative, I think we should focus on the elements that individual narrators emphasize. I believe we will better understand the “function” of NDE's by associating the particular foci of their stories with the personal transformative changes wrought by the experience.

The NDE's that have been the topic of this chapter are, by definition, narrated by those who have clinically died and returned to life or by those who reasonably thought they were in danger of imminent death. In this case, the reality of dying is also the experience of dying, and both belong to the narrator. However, as is important to keep in mind that, because the narrator/actor does not remain dead, we cannot be sure that the

⁹³ McDonald, “Childhood NDE,” 19.

narrated death journey is the same as the death process for someone who remains dead. I have yet to discover Coincidental-DE's or Empathetic-DE's that are linked to a particular NDE. There is something about the final passing of someone that triggers a DRE in someone who is not dying.

I believe that the similarities in the characteristics of NDE's, Coincidental-DE's, and Empathetic-DE's suggest that NDE's are part of a spectrum of DRE's that include all three categories. The next chapter thus explores Coincidental-Death Experiences, in which the narrator experiences phenomenological and/or sensory events at the time of someone else's dying. That is, the narrator /observer does not die and, unlike NDE's, the decedent remains dead. The perspective of the narrator is thus as an observer rather than an active participant in the death process.

Chapter 2: The Coincidental-Death Experience

2.1 Introduction

In this model, I suggest that second major categorization of DRE's should be termed Coincidental-Death Experiences ("Coincidental-DE's"). The critical aspect of this typology is that, unlike those undergoing a NDE, the narrator is not undergoing the experience of dying nor is she in fear of imminent death. Rather, the narrator is experiencing unusual phenomena related to the death of another person.⁹⁴ Here, I draw a distinction between those narrators who are aware that the object is either deceased or dying and are often present at the passing, and those narrators who are not aware of this fact and are often located elsewhere. This distinction allows for comparison of the witnessed phenomena, and also aids in establishing credibility of the reports of those who are present at, or aware of, the death and presumably under strong emotional distress. The critical component underlying the appearance and intensity of Coincidental-DE's appears to be empathetic identification—the emotional relationship between the decedent and the Coincident-DE'r.

Many of the common phenomena detailed in my Coincidental-DE category have been included in other research studies as part of a broader group variously entitled Shared-Death Experiences, Deathbed Visions, and Deathbed Coincidences, of which the first term is most commonly found. While it would be simpler to retain the connotation

⁹⁴ There are many stories of death-related phenomena that I believe may be considered Coincidental-DE's, such as clocks stopping, cold breezes or winds, items of sentimental value to the deceased breaking, all occurring at or near the time of the death, of which the observers are unaware. Because these are so numerous, and because they are harder to objectively verify, these accounts do not appear to have been consistently gathered or even self-reported. Consequently, I am leaving them out of this paper. However, I believe that these events may similarly be considered Coincidental-DE's and thus may be considered within the approaches suggested in this paper.

of Shared-Death Experiences, it is simply incorrect. In Coincidental-DE's, the narrators are not *sharing* in the deaths of others as they are not dying. Rather, the narrator is experiencing a separate set of phenomena, many of which bear strong similarities to those reported by NDE'rs. In addition, the events experienced by the narrator take place at or near the same time of the death of another. Hence, my terminology of Coincidental-Death Experiences. The distinction to be made is that, in both the NDE and the Coincidental-DE, the narrator survives. However, in the Coincidental-DE, the decedent—the person who “triggered” the experience—remains dead while the narrator was never in any danger of dying.

2.2 Phantasms of the Living

The Society for Psychical Research (“SPR”) was the first group to study psychical phenomena under a rigorous methodology.⁹⁵ Formed in 1882, the founding members included Henry and Eleanor Sidgwick, Edward Gurney, Frederic Myers and other prominent intellectuals. At this time, mesmerism was sweeping Britain and the European continent, and spiritualism and mediumship were becoming more popular. It was in the light of these cultural developments that the SPR identified a need to examine such claims under as meticulous a scientific method as possible. With a mandate to expose fraudulent claims, the SPR's methodology involved data collection and verification, followed by categorization. In 1866, Gurney, along with Meyers and Frank Podmore, published *Phantasms of the Living*, in which over seven hundred paranormal experiences

⁹⁵ In his Introduction, Fredric Myers states his intent to apply the scientific method to the study of survival after death; that “this method has never yet been applied to the all-important problem of the existence, the powers, the destiny of the human soul.” Frederic W. H. Myers, *Human Personality and its Survival of Bodily Death*, (London: Longmans, Green, and Co, 1907), 1.

were detailed.⁹⁶ Many of these reports were classified as “crisis apparitions” in which the figure of a person who was dying or was in imminent fear of death was seen by someone who was unaware of this fact.⁹⁷ The definition of “apparition” was quite broad, but intentionally excluded sightings of people who were known by the narrator to be dead, that is, what we would now call “ghosts.” The term “phantasms of the living” consisted of the apparition of all those “still living, as we know life, though they may be on the very brink and border of physical dissolution . . . including not visual phenomena alone, but auditory, tactile, or even purely ideational and emotional impressions.”⁹⁸

Myers later wrote that apparitions are “a manifestation of persistent personal energy... being exercise[d] after death which is in some way connected with a person previously known on earth.”⁹⁹ In this regard, Myers views communications between decedent and observer as connected: “the telepathic message generally starts from, and generally impinges upon, a subconscious or submerged stratum in both agent and percipient.”¹⁰⁰ It was thus entirely possible that the time of telepathic transfer was at the decedent’s passing, but that the message remained latent in the observer’s mind until it was in an appropriate state for the message to surface.¹⁰¹ For this reason, only data in

⁹⁶ Edmund Gurney, Frederic Myers, and Frank Podmore, *Phantasms of the Living, Volume I* (London: Rooms of the Society for Psychical Research, 1886), 1

⁹⁷ A second category was that of “emotion” in which the experiencer reported extreme feelings of anxiety, distress or the need to return home immediately either to check on someone or to await news. These often occur while awake, in contrast to apparitions that generally manifest in dreams. See, e.g., Gurney, Myers and Podmore, *Phantasms of the Living*,” 281.

⁹⁸ Gurney, Myers and Podmore, *Phantasms of the Living*,” xxxv.

⁹⁹ Myers, *Human Personality and its Survival of Bodily Death*, 215.

¹⁰⁰ Myers, *Human Personality and its Survival of Bodily Death*, 217.

¹⁰¹ Myers, *Human Personality and its Survival of Bodily Death*, 223. Myers found that the number of apparitions “increase very rapidly for the few hours which precede death [i.e., a precognition], and decrease gradually during the hours and days which follow, until after about a year’s time they become merely sporadic” and that such apparitions could occur during moments of crisis for the sender in which they assumed that they were in danger of imminent death. Myers, 225.

which the time between the decedent's death and the observer's experience was twelve hours or less was included.¹⁰²

In describing this research, William James noted that Gurney explained such apparitions as "the mind of the person undergoing the calamity was at that moment able to impress the mind of the percipient with a hallucination."¹⁰³

In order to test the likelihood of such veridical hallucinations being due to mere chance, Gurney instituted the "census of hallucinations," which has been continued with the result of obtaining answers from over twenty-five thousand persons, asked at random in different countries whether, when in good health and awake, they had ever heard a voice, seen a form, or felt a touch which no material presence could account for. The result seems to be, roughly speaking, that in England about one adult in ten has had such an experience at least once in his life, and that of the experiences themselves a large number coincide with some distant event. The question is; Is the frequency of these latter cases too great to be deemed fortuitous, and must we suppose an occult connection between the two events?¹⁰⁴

James seemed particularly impressed that the Sidgwicks, founding members of the SPR, attempted to mathematically calculate the probability of apparitions being seen on the day of the decedent's passing. They concluded calculated that "the cases where the apparition of a person is seen on the day of his death are four hundred and forty times too numerous to be ascribed to chance."¹⁰⁵

¹⁰² Myers, *Human Personality and its Survival of Bodily Death*, 222.

¹⁰³ William James, "What Psychical Research has Accomplished," in *The Will to Believe: And Other Essays in Popular Philosophy*, (Cambridge Library Collection - Philosophy, 1912), 299-328, 307. https://en.wikisource.org/wiki/The_Will_to_Believe_and_Other_Essays_in_Popular_Philosophy/What_Psychical_Research_Has_Accomplished.

¹⁰⁴ James, "What Psychical Research has Accomplished," 308.

¹⁰⁵ James described the Sidgwicks' method of calculation in great detail. "If there be only a fortuitous connection between the death of an individual and the occurrence of his apparition to someone at a distance, the death is no more likely to fall on the same day as the apparition than it is to occur on the same day with any other event in nature. But the chance-probability that any individual's death will fall on any given day marked in advance by some other event is just equal to the chance-probability that the individual will die at all on any specified day; and the national death-rate gives that probability as one in nineteen thousand. If, then, when the death of a person coincides with an apparition of the same person, the coincidence be merely fortuitous, it ought not to occur oftener than once in nineteen thousand cases. As a matter of fact, however, it does occur (according to the census) once in forty-three cases, a number (as

Almost all of the accounts were submitted in response to a newspaper ad or through word of mouth; therefore, they were recollections, many of which occurred years prior to the SPR's recordation, and participants self-selected themselves. Consequently, the investigators established a firm set of protocols under which accounts were assessed in order to avoid the very human tendency to "make the account *graphic* and *picturesque*;" a tendency which conflicted with another desire, which was "the instinct to *win belief*."¹⁰⁶ The first test of an account was its independent corroboration, by a contemporaneous writing by the subject experiencer detailing the event or by a witness statement verifying that the subject had spoken of the experience shortly after it occurred. This was the most valuable type of evidence; the SPR ranked accounts in which the subject did not make a coeval verbal or written declaration in a decreasing order of validity. Frederic Wingfield's report, given in 1884, is an example of a credible report.

On the night of Thursday, the 25th of March, 1880, I retired to bed after reading till late, as is my habit. I dreamed that I was lying on my sofa reading, when, and looking up, I saw distinctly the figure of my brother, Richard Wingfield-Baker, sitting on the chair. I dreamed that I spoke to him, but that he simply bent his head in reply, rose and left the room. When I awoke, I found myself standing with one foot on the ground by my bedside, and the other on the bed, trying to speak and to pronounce my brother's name. So strong was the impression as to the reality of his presence and so vivid the whole scene as dreamt, that I left my bedroom to search for my brother in the sitting room. I examined the chair where I had seen him seated, I returned to bed, tried to fall asleep in the hope of a repetition of the appearance, but my mind was too excited, too painfully disturbed, as I recalled what I had dreamed. I must have, however, fallen asleep towards the morning, but when I awoke, the impression of my dream was as vivid as ever—and I may add is to this very hour equally strong and clear. My sense of impending evil was so strong that I at once made a note in my memorandum book of this "appearance," and added the words, "God forbid." Three days afterwards I received the news that my brother had died on Thursday

aforesaid) four hundred and forty times too great." James, "What Psychical Research has Accomplished," 309.

¹⁰⁶ Gurney, Myers and Podmore, *Phantasms of the Living*, 127-129.

evening, the 25th of March, 1880, at 8:30 PM, from the effects of the terrible injuries received in a fall while hunting with the Blackmore Vale hounds.¹⁰⁷

Mr. Wingfield's story is very typical of the types of narratives detailed in *Phantasms of the Living*. The experiencer is generally asleep, is not located near the dying person and has no knowledge of his death. The impression left on the subject is so strong that they begin to look or call for the object of the apparition. Within a short period of time (the SPR limited their study to a maximum twelve hour interval), they tell someone or write down a note regarding the experience.¹⁰⁸ The details of the event remain vivid in the subject's memory for the rest of their life.

Recalling that the SPR was immersed in the age of mesmerism and telepathy (a term actually coined by Frederic Myers as an analogy to the telegram), it is not surprising that the group "had reason to believe that the primary phenomenon of Thought-transference is solidly established."¹⁰⁹ Apparitions and other Coincidental-DE's were hypothesized to result from a "thought" sent by the dying person to the receiving agent or subject, which was possible because of a

relaxation of some *coercitive force*, with which under normal conditions is able to limit the channels of impression to those through which the recognized senses act in the recognised way. However this may be, it would appear that the excitement of danger or imminent death has a potent influence in facilitating the transference of supersensory impressions. . .¹¹⁰

Gurney, in particular, thus believed that the apparitions were hallucinations telepathically-generated by the dying person that were received by the subject at a time

¹⁰⁷ The note in the memorandum book stated "Appearance—Thursday night, 25th of March, 1880. R.B.W.B. God forbid!" Gurney, Myers and Podmore., *Phantasms of the Living*, 200.

¹⁰⁸ Gurney, Myers and Podmore, *Phantasms of the Living*, 512.

¹⁰⁹ *SPR Proceedings*, Vol. 1, 1882-83, 1(a).

¹¹⁰ *SPR Proceedings*, Vol. 1, 1882-83, 1(a)(iii).

when the conscious mind was not in complete control, such as when the subject was asleep or daydreaming.

Myers takes his concept a step further in the introduction to *Phantasms*, suggesting that “inhibiting normal perception . . . [results] in this temporary freedom from preoccupation by accustomed stimuli in his mind [and that] may reveal those latent and delicate capacities of which his ordinary conscious self is unaware.”¹¹¹ The idea is that of a filtering mechanism by which the brain modulates the type and amount of stimuli reaching waking consciousness. The mechanism developed as an form of evolutionary fitness for survival. However, on occasion that filter is released, allowing the subliminal self to receive and to reveal the stimuli.¹¹²

2.3 Modern Coincidental-DE Accounts and Characteristics

One of the critical differences between modern and historical Coincidental-DE’s is that now more people die in hospital settings or at home in hospice; family and friends are thus aware that the passing is forthcoming. In SPR accounts, most of the reported deaths are unexpected and due to an accident or sudden illness. Compared to modern narratives, the SPR accounts of Coincidental-DE’s are remarkable for their sole focus on deathbed apparitions. More recent accounts of Coincidental-DE’s do not emphasize apparitions and generally describe a number of other features.¹¹³ For example, in

¹¹¹ Gurney, Myers and Podmore, *Phantasms of the Living*, xliii.

¹¹² Myers’ theory of different levels of consciousness and a filtering mechanism, along with a collateral hypothesis that suggests the evolutionary development of brain asymmetry might be filtering and locating different forms of attention in different hemispheres, is further discussed in the Epilogue.

¹¹³ One unusual exception to the modern lack of apparitions is thus described: “I saw my grandfather walking down the hall of my house which is 1200 miles [away] from his in Kentucky. He died of a massive coronary. When I saw him, he was almost opaque in appearance, as if you were viewing a hologram. I received a phone call two days later that he had passed. The time I saw him almost precisely coincides with the time of his death, [but] I was not told of his death for two days. I was extremely close to him in the family frankly was trying to figure out which one of them should tell me.” Kelly, “Mediums, Apparitions, and Deathbed Experiences,” 78.

Glimpses of Eternity: An Investigation into Shared Death Experiences, Raymond Moody described what he termed “Shared Death Experiences,” which was a compilation of my separate categorizations of Coincidental-DE’s and Empathetic-DE’s.¹¹⁴

2.3.1 Visual Changes in Decedent’s Room at the Time of Death

The presence of a sudden, bright light in the dying person’s room is an often-reported characteristic of Coincidental-DE’s. Sometimes the light is accompanied by a spiritual presence, or a vapor that is emitted from the deceased’s body. One woman wrote of her mother’s deathbed scene, a narrative that was corroborated by the other four Anderson family members present.

Suddenly, a bright light appeared in the room. My first thought was that a reflection was shining through the window from a vehicle passing by outside. Even as I thought that, however, I knew it wasn’t true, because this was not any kind of light on this earth. I nudged my sister to see if she saw it too, and when I looked at her, eyes were as big as saucers. At the same time I saw my brother literally gasp. Everyone saw it together and for a little while we were frightened. Then my mother just expired . . . At that moment, we saw vivid bright lights that seemed to gather around and shape up into . . . I don’t know what to call it except an entranceway. . . We saw my mother lift up out of her body and go through that entranceway. Being by the entranceway, incidentally, was a feeling of complete joy. My brother called it a chorus of joyful feelings, and my sister heard beautiful music, although none of the rest of us did.¹¹⁵

Other narratives similarly describe a transparent film or envelope of light that resembles a vapor lifting off as it gathers into the shape of a person before moving into the light and disappearing.¹¹⁶

One of the oddest and most uncommon features of Coincidental-DE’s are reports of rooms in which deaths are occurring suddenly changing shape. A square room

¹¹⁴ Moody, Raymond and Paul Perry, *Glimpses of Eternity: An Investigation into Shared Death Experience*. (London: Rider, 2010).

¹¹⁵ Moody and Perry, *Glimpses of Eternity*, 13-14.

¹¹⁶ Moody and Perry, *Glimpses of Eternity*, 24; 26; 34; 101; 103; 129.

suddenly shifts into a different geometry and sometimes opens into “an alternative reality;” “the room was like Disneyland in that it made me realize that most of the stuff that happens in the world happens behind the scenes and that all we see is the surface, where the functioning part is.”¹¹⁷

2.3.2 Non-visual Sensory Effects in Decedent’s Room at Time of Death

While a few NDE’rs have reported hearing music, the vast majority of reports come from persons near or with a dying subject. One woman seated at the bedside of her dying husband heard “the “most beautiful and intricate music I had ever heard. Every note was a piece of flitter. I was seeing music.”¹¹⁸ The SPR contains several relevant cases. In one, a couple heard music coming from the room of a dying deaf-mute relative, but each described the sound differently: Mrs. Allen described it as “resembling ‘singing-sweet music without distinguishable words,’” while her husband stated that the “sound resembled the full notes of an organ or of an aeolian harp.”¹¹⁹ In some cases, the music accompanies the light and/or vapor moving away from the body.

Suddenly there was the most brilliant light shing from my husband’s chest, and as this light lifted upwards there was the most beautiful music and singing voices, my own chest seemed filled with infinite joy . . . a nurse said, “I’m sorry love. He has just gone.” I lost sight of the light and the music.¹²⁰

¹¹⁷ Moody and Perry, *Glimpses of Eternity*, 80.

¹¹⁸ Moody and Perry, *Glimpses of Eternity*, ” 87.

¹¹⁹ Melvyn Willin, “Music and Death: An Exploration of the Place Music has at the Time of Human Death with Special Emphasis on the Near Death Experience,” *Paranormal Review*, Issue 58 (2011): 3-10, 5. Several of the SPR cases specifically mention the sound of an aeolian harp.

¹²⁰ Peter Fenwick, “Dying: a spiritual experience as shown by Near Death Experiences and Deathbed Visions.” https://www.rcpsych.ac.uk/docs/default-source/members/sigs/spirituality-spsig/spirituality-special-interest-group-publications-pfenwickneardeath.pdf?sfvrsn=686898bc_2

Another person described the music as tying himself to his dying father's journey, that they "were bundled together carrying on our conversation in some other place, kind of between worlds."¹²¹ Within a minute of the father's death, the music ceased.

All of these reports are from Coincidental-DEr's. Interestingly, music is rarely reported by NDE'rs; suggesting that music might be a characteristic more associated with death (rather than dying) and thus more likely to be present when the subject actually terminally passes away.

2.3.3 Presence of Spirits

Some descriptions dwell on the presence of spirits, seen or unseen, immediately prior to death. One woman saw her deceased father "coaching my mother out of her body."¹²² Another Coincidental-DE'r reported, "I was standing by her bed and no one else was in the room. She had an agonal respiration, and at that moment I had a very clear picture of [her deceased husband] standing across from me with his arms outstretched, and he said: [her nickname], I've been waiting for you."¹²³

Hospice staff, in particular, will speak of feeling a presence beside them as their patient passes.¹²⁴ Similar narratives tell of patients greeting or recognizing someone right before they die as witnessed by those attending the death. "Right before my grandma died she looked up with a beautiful smile and said, 'Hi Edward [this was my grandpa.] I have missed you so much.' Then she died."¹²⁵ In another report,

an elderly woman . . . became seriously ill. When the doctor said that she did not have long to live, the family gathered around her bed. Suddenly she seemed much more alert and the expression on her face changed to one of great pleasure and

¹²¹ Moody and Perry, *Glimpses of Eternity*, 144-145.

¹²² Moody and Perry, *Glimpses of Eternity*, 37.

¹²³ Kelly, "Mediums, Apparitions, and Deathbed Experiences," 86-87.

¹²⁴ Moody and Perry, *Glimpses of Eternity*, 102.

¹²⁵ Kelly, "Mediums, Apparitions, and Deathbed Experiences," 87.

excitement. She raised her self slightly and said: ‘Oh, Will, are you there?’—and fell back dead. No one present was named Will, but shortly afterwards they learned that the woman’s brother, Will, who lived in England, had died two days before her own death.¹²⁶

2.4 The “Call”

If experienced by the patients, these visits suggest some version of a request for, or an offer of, assistance in the dying process. Studies involving end-of-life caregivers generally have not discriminated between spiritual presences identified by patients or personally witnessed by family or staff. If the latter case, these would qualify as Coincidental-DE’s. A study by Peter Fenwick, a noted NDE researcher, found that 54% of the professional caregivers interviewed at nursing homes and hospices reported that their patients had “visions of dead relatives or religious figures who appear to come and sit on the dying person’s bed and have the express purpose of taking them away.

“¹²⁷Fenwick further notes that

25% of 118 visions - were of parents. 17% were of persons unknown often spiritual, 14% were greeted with joy but the dying were to [sic] ill to speak and identify them, 14% were spouses, 9% siblings, 3% grandparents and 14% other relatives. These visions evoke very positive feelings in the dying, who smile, seem pleased to see them and communicate with them in a positive way. The visitors often indicate that they have come to be with the dying and look after them as they transit in the death process. Sometimes they will set a precise date – for example saying they will be back on Tuesday - and occasionally even give a time.¹²⁸

Robert Crookall, a British scientist who had become fascinated by OBE’s, published a number of works on astral projection and NDE’s, which he termed “pseudo-death experiences,” in the 1970’s and 1980’s.¹²⁹ Crookall asserts that the first element of

¹²⁶ Kelly, “Mediums, Apparitions, and Deathbed Experiences,” 87.

¹²⁷ Peter Fenwick, “Non Local Effects in The Process of Dying: Can Quantum Mechanics Help?” *NeuroQuantology*, 8, no. 2 (2010), 155-163, 158.

¹²⁸ Fenwick, “Non Local Effects in The Process of Dying,” 158.

¹²⁹ Robert Crookall, *Intimations of Immortality “Seeing” that Led to “Believing,”* (Exeter: Great Wheaton & Co, 1965).

the dying process is a “Call” that dying persons intentionally send out to contact departed loved ones, the purpose of which is to assist in the transition from life to death.¹³⁰ In this regard, the Call harkens back to the role of the spiritual guide such as those in the *Tibetan Book of the Dead* and Dante’s *Divine Comedy*. It also references Myers’ hypothesis of a telepathic message impressing itself on a receiver’s subconsciousness. I believe that the Call is an important aspect of DRE’s, although not included in the Moody/Ring/Greyson models.

An anonymous posting on the IANDS site tells the following story.

On the night of 29 September 2013, I was asleep in my bed in north London (England), and my father was over 80 miles distant, in a dementia nursing home on the south coast.

I was jolted awake at around 1:30 am, and I sat up in the darkness. A tremendous and intense rushing energy had filled the room. I couldn’t see it, but I could sense it, and it was indescribable but 'sparkling.' “Dad!” I exclaimed. I just knew it was him. And I knew that he was dying, and that he had come to me to help him push over. And somehow I knew what he needed and what I had to do. I concentrated for all my worth and wished him all the peace and love and energy that I had in me - and forgiveness - and it felt both personal and universal. I do not know how long this went on for, as time stood still. And then I lay back down, and I looked through the purple-ringed portal in the back of my eyes* and I saw the light - that clichéd image - a giant door-shaped hole in the darkness, and silhouetted against it were countless figures, outlined by the light, all slowly streaming toward it. And I felt very great peace, and I drifted from this vision back into sleep.¹³¹

Another anonymous woman posted an account on the IANDS website of an event that happened over twenty years ago. After noting that she had an unpleasant and difficult relationship with her mother when her mother was still living, the narrative continued.

¹³⁰ Crookall, *Intimations of Immortality*, 71-72.

¹³¹ <https://iands.org/ndes/nde-stories/nde-like-accounts/1196-i-shared-my-father-s-death-helping-him-push-over.html?highlight=WyJzaGFyZWQlLCJzaGFyZSIzLnNoYXJpbmciLCJzaGFyZXMiLCJkZWFOaCIslmRIYXR0J3MiLCJkZWFOaHMiLCInZGVhdGgnIiwZGVhdGgnIiwZGVhdGgnLiIsIldkZWFOaCcsIiwic2hhcmVkIGRIYXR0Il0=>

One morning, as I readied myself for work, putting on my make up at the sink in the bathroom, something shocking happened. My husband had already left for work and my children were in school so the house was unusually quiet. As I applied my lipstick, the entire master bathroom was enveloped with a fragrance so strong, so unmistakable, it shocked me to my core. It was the unique smell of my mother. I didn't know on a conscious level what my mother had smelled like but subconsciously the connection of the baby to the mother was cemented by smell.

I knew without a doubt that my departed mother was trying to reach me. I put down my lipstick and sat in a nearby chair, completely stunned. What did she want to tell me? I opened myself to receiving her message. She told me three things: 1. Your father is going to die very soon, 2. There is nothing you can do to change this, and 3. I am going to help him. And then the fragrance withdrew quite suddenly.

Two weeks later, her father was hospitalized. On the night of his death, from a condo in which she was staying, the daughter saw a light gathering about her father, and realized that the ineffable light was her mother's spirit.

The gathering light was beyond words, inviting, intense, pure, a light unlike any I had seen before. I became aware of movement within the light and focused on that.

I soon saw that my mother was in the light, was part of the light and that this was the light of life itself, the light of God. She was more beautiful than any woman I had ever seen before. There was a purity and innocence in her essence. When I saw her this way there was, in an instant, complete forgiveness for anything I might have perceived as hurtful about her behavior on this earth. . . . I saw my mother reach out to my father and lift him into her light, cradling him in her arms. Then the light began to fade and disappear from my vision. I then saw with my body's eyes that I was in the bed in my father's condo where I had been before the vision, my sister next to me still snoring.

Noticing that the clock registered just before midnight, she awaited the call from the hospital, which indeed told her that her father had died at that time. The transformative effects on this woman were enormous; she had not been a church-goer prior to this and the narrative suggests that she did not have any religious practices. She

immediately became convinced that the message she was sent was “God is love and love is all. Our purpose in this realm is to love each other.”¹³²

2.5 Relationship of Coincidental-DE’r to Decedent

Based on the reports, in most narratives the Coincidental-DE’r is has a significant emotional tie to the decedent. It appears that a biological relationship is quite common, but this could be the case because relatives are most likely to be at someone’s deathbed, particularly if the death is expected. But this is not always requisite, as in Mrs. Saxby’s recollection.

I was sleeping with my sister, Maria. Suddenly the curtains of our bed, at the side I slept, were undrawn, and Mr L. appeared standing there. He said, addressing me by name, “My mother is dead.” I tried to persuade myself I had been dreaming, and Maria said I had dreamt it; but after a short time the same thing was done again, and the same announcement made. I was rather chaffed at breakfast because of the story I told. After breakfast, . . . I heard myself called . . . it was the daughter of the man whom I’d seen twice at night and the granddaughter of the old lady whose death had been announced. She was riding on horseback. She said, “Have you heard? My father is sent for, and my grandmother is dead!”¹³³

Cases such as this in which the phantasm appeared more than once and there were numerous witnesses to the event were of more significant interest to the SPR investigators than the fact that the parties were unrelated. Yet the preponderance of such such reports leads me to conclude that it is important to understand the role of empathetic relationships in Coincidental-DE’s.

2.6 Conclusion

¹³² <https://iands.org/ndes/nde-stories/nde-like-accounts/1330-daughter-forgives-her-mother-following-shared-death-experience-with-her-father.html?highlight=WyJzaGFyZWQilCJzaGFyZSIsInNoYXJpbmciLCJzaGFyZXMiLCJkZWZ0aCIslmRIYXR0J3MiLCJkZWZ0aHMiLCInZGVhdGgnIiwZGVhdGgnIiwZGVhdGgnLiIsIdkZWZ0aCcsIiwic2hhcmVklGRlYXR0Il0=>

¹³³ Gurney, Myers and Podmore, *Phantasms of the Living*, 357.

In a Coincidental-DE, a narrator/observer becomes aware of the final passing of someone else when they experience a super normal event that so indicates. The distinction with Coincidental-DE's and NDE's lies in the location of the narrator. In a NDE, the narrator is the same person who returns to life. In a Coincidental-DE, the narrator is the observer witnessing events concomitant with, or shortly following, the irremediable passing of another. Typical Coincidental-DE features include apparitions, either in the room in which the decedent passes or manifesting at a different location to observers who are unaware that the decedent has passed; visual effects such as a bright light; other sensory phenomena such as hearing music or smelling a particular scent associated with the decedent; and, quite commonly, sensing the presence of spiritual beings, often related to the decedent.

Many of these Coincidental-DE features are reported by NDE'rs as well. Coincidental-DR's primarily, but not exclusively, occur to people who are emotionally connected with the decedent or even someone related to the decedent. Empathy thus appears to be an important factor in Coincidental-DE's. In my research, however, I found that many studies do not examine the relationship between the experiencer and the decedent.

Empathetic-DE's also appear to require a significant emotional relationship with the decedent. In this case, however, the narrator/observer, the Empathetic-DE'r, undergoes a similar journey to that reported by NDE'rs, often relating a narrative that reads as a personal NDE. The relationship amongst the DRE's are thus seen the congruence in the similarities in the features of all three categories of DRE's and in the

emotional bond with the decedent connecting Empathetic-DE's and Coincidental-DE's to NDE's. These factors will be further discussed in this next chapter on Empathetic-DE's.

Chapter 3: The Empathetic-Death Experience

3.1 Introduction

In my suggested methodology, the final category of DRE's is that of Empathetic-Death Experiences ("Empathetic-DE's"). It is probably the least-common category, although this research has led me to conclude that they are more common than I first believed. The range of Empathetic-DE's is, unsurprisingly, fairly broad, as they contain aspects of both NDE's and Coincidental-DE's. The common factor that I have located as defining for an Empathetic-DE is the experience of accompanying the deceased through the final death journey. The Empathetic-DE occurs at the same time as the decedent's passing. Moreover, it is a mirror of a NDE, with its NDE elements experienced by the narrator/observer Empathetic-DE'r from the apparent perspective of the dead person. The super normal features that are encountered by the narrator—such as the decedent's life in review or meeting spiritual beings—are those relevant to the decedent, not the narrator/observer.

An Empathetic-DE is similar to a Coincidental-DE in that the narrators of both experiences function as observers of the decedents' passing. They also share features of a NDE, although the Empathetic-DE will more closely resemble a NDE account. Consequently, Empathetic-DE's seem to be qualitatively different from Coincidental-DE's, presumably because an Empathetic-DE is not confined to witnessing phenomena upon a person's passing, but is a NDE-like journey in itself. The mirroring aspect of an Empathetic-DE leads to the hypothesis that the Empathetic-DE'r assumes an active role in the decedent's death journey. Perhaps the Empathetic-DE'r is the accompanier.

Perhaps the Call does not always go out to a previously deceased person or spirit, but to a living person who is strongly emotionally connected to the decedent.

It is with the creation of an Empathetic-DE category that the importance of a categorization method becomes apparent. Comparisons of the categories, and their respective common elements, leads to the ability to compare the different discourses surrounding the rather muddy discussions of NDE's and NDE-like events. For example, Empathetic-DE's experience features common to NDE's that are not found in Coincidental-DE's, such as witnessing the dying person's life in review or joining them in an out-of-body experience. These phenomena cannot be attributable to neurobiological changes during the death process. Second, Empathetic-DE's are individual occurrences. Unlike Coincidental-DE's where more than one person might witness a paranormal event, Empathetic-DE's are intimate; it is a set of phenomena that seems to be shared only between the decedent and the narrator/observer. Third, an Empathetic-DE is always an incredibly intense event; perhaps even more so than an NDE because of the additional factor of having been "called" to witness another's passing. Much like NDE's certainty regarding their experience, Empathetic-DE's do not seem to question that they witnessed the passing of the deceased and that they will undergo a similar passage upon their own final death. Similarly to NDE's, this belief forms the basis of altered, and permanent, spiritual tenets that do not appear to require corroboration from other people or sources.

3.2 My Personal Empathetic-DE

I would like to use my own Empathetic-DE as the first example. It was four days before my eleventh birthday. I was asleep in my bed in our home in Manila, where I and my brother and sister had been born and raised. My mother was in South Dakota; later I

would find out that she was debating divorcing my father. My father, with whom I was extremely close, had gone out for the evening. I had heard him earlier on the phone speaking with some German friends and understood that they were meeting for a few drinks. He told us not to stay up late as we had summer school starting at 7:15 the next morning, kissed us goodnight and left.

In the middle of the night, I had a dream in which I was gently “taken” to my father, who was driving down a dark road. I suddenly became aware that I was in my father’s car, hovering in the back seat behind his right shoulder. I could hear everything in his mind. He was upset about something, yet his thoughts were extremely clear. He was thinking about us: my mother, myself, and my siblings. There was a woman in the passenger seat, but she seemed very distant; I was not privy to her thoughts nor was I interested in them.

It was raining hard, one of those tropical storms that come up quickly and disappear even faster. There were no lights on the highway. Without warning, something was in front of the car. It was large and heavy and dark; it could not be seen until we were upon it. My father swerved to avoid it, but suddenly he and I were floating up to the sky. We traveled on these magnificent waves of love, a joy and contentment that I have never again experienced. We were moving along a dark tunnel and I was so happy. Unexpectedly, a small light appeared at the end of the darkness. We started moving more quickly and the light grew larger. As we neared it, I was stopped. My father continued towards it and I tried to go as well. There was a “physical” resistance that became increasingly stronger; after my third attempt, a very firm “voice,”—which I actually physically felt more than heard, almost like sound waves somehow translating

into English—emerged from the light and said, "It is not your time. You must go back." I started to argue, asking to please go with my father. The voice repeated these sentences. Abruptly, I was whisked away by a strong "wind" that moved me quickly through space, accompanied by lights of different colors. The journey back felt almost instantaneous and I found myself hovering over the crash site. There was an ambulance there, which loaded my father and the woman into the back and sped to Makati Medical Center. I know that because I followed them, and at the hospital, I heard a doctor pronounce my father dead. I also knew the woman had survived and was hospitalized.

The next morning, I awoke feeling incredibly calm and beloved. I vividly recalled the dream and even stopped in front of my parents' bedroom door; normally a terrifying dream would have had me running in to make sure everything was okay. But I was so preternaturally calm that I had no need to do so. At breakfast, the cook told us that our father had to go to Cebu on business and that we were to go to the home of close family friends, the Clemos, after school. I looked at her and thought, "You're lying. Daddy is not in Cebu, he is dead." After school, which ended at noon, we went to the Clemos. Another family with whom we were close, the Wilsons, were there as well. The children played while the adults spoke in another room.

As the afternoon wore on, my calmness evaporated and I became very agitated. Two of the girls were whispering and I went up to them, shook each of them violently and yelled "tell me about my father." They were frightened and went to tell their parents. I was called into the Clemo's master bedroom. The adults had been trying to keep me and my siblings isolated until my mother returned to Manila (a 24-hour trip at the very least) so she could tell us of our father's death. But now, they believed that one of the

maids must have said something to me, and felt that they had to tell us before the situation escalated. I remember sitting on the side of the bed, staring at the wall.

“Something happened to your father.” I was silent because I already knew that. “Don’t you want to know what happened?” The question being rather rhetorical, I responded yes and so they told me that he died in a car crash. I was benumbed. The reality of the dream, and of its impossibility, overtook me but now I did not have the comfort of the loving waves to soothe me.

Mrs. Wilson asked me if I wanted to tell my brother and sister or if they should, which in retrospect seemed a rather strange question for a ten-year-old. I said no, but after they left the room, I reconsidered. I felt that the reason I had the dream, and that I had known my father was thinking of us right before the crash, was to let me know that I would now have to take care of my family. This sense of purpose overtook my grief and was the predominant factor in almost all the decisions that I made, starting from that day to at least forty years later when I began to question whether its influence on my life had been positive.

Very soon after my mother returned, I asked if we could go see the lady in the hospital. She was shocked that I knew about her and asked me who had told me. I told her about my dream. Of course, I had no way of knowing that this woman was my father’s mistress, that he had brought her back to our home earlier that night, that there had been a fight, and that, for the first time any of us could recall, he removed his wedding and family crest rings and placed them in the den bathroom where they were found a few days later.

My mother confirmed what I knew—the hospital, the time, the dark highway without lights on which a truck had broken down, the rain-slicked roads that made the crash inevitable. Thankfully, she did not disbelieve me; she had experienced paranormal phenomena throughout her life and knew I had as well. In this regard, I was much more fortunate than others surviving super normal experiences.

As my family talked about our father's death, we discovered that both my brother and mother had experienced Coincidental Death events at the time. My mother in Sioux Falls woke up very early in the morning and waited, pacing and smoking, for the phone call that she knew was coming. My brother dreamt of fire and flames all night and, sadly but not unusual for an eight-year-old, thought he had somehow caused the death because, despite numerous warnings, he had left our father's tools out in the rain and they had rusted.

My experience involved the common NDE features of an out-of-body journey, a tunnel, a brilliant light, a voice and a boundary, as well as the profound sense of unconditional love. The sense of 'why' or the purpose for being 'selected' for this event is another common trait of an Empathetic-DE, often leading to decisions that transform or redirect the experiencer's entire life. My Empathetic-DE had at least two unusual traits: I was not physically present with the deceased upon his passing, but was "taken" to my father *prior* to the accident; and that I was aware of his thoughts and feelings and shared his senses immediately before his death. I was not just "called," I was escorted.

3.3 Other Features of Empathetic-DE's

While most Empathetic-DE's, as well as many Coincidental-DE's, occur while asleep, both can take place while the observer is awake and conscious of the actor's death.

3.3.1 Unconscious and Conscious Awareness of Decedent's Death

An Empathetic-DE while sleeping—which is first interpreted as a dream—is another common trait. My Empathetic-DE is one example. Another dream was related to me some years ago by Mary, who said it occurred around age six, a few months after her beloved grandfather had passed. In her dream, her grandmother came to her to say goodbye and, as Mary “watched,” a golden staircase appeared. Her grandfather stood at the top of the stairs and descended part of the way. Mary's grandmother stepped up to meet him and Mary tried to climb the stairs as well. She was told to go back, after which both grandparents turned to wave goodbye, “covered with white light and sparkling flecks.” In another narrative, Sussanna had a detailed dream in which she walked with her husband in a beautiful glen with a bright light in the distance. Suddenly, he began to tell her how frustrated he was to be dying and how he couldn't convince the clerk to call an ambulance. He narrated how he was floating above his body and was filled with peace and love. But then he told her he had to leave and, when she attempted to follow, he angrily told her to return. Upon awakening, she was hurt and anxious, but not surprised when a pastor and a police officer appeared two hours later to tell her that her husband had been killed at the corner store during a robbery.¹³⁴

¹³⁴ Moody and Perry, *Glimpses of Eternity*, 67.

Margaret Helen's experience is an example of an Empathetic-DE that occurs while awake. In this recollection, Margaret Helen, "knowing" her friend had died, raced to his side and then accompanied him on his passing. The differences with my Empathetic-DE was that she was consciously aware that he had died and was physically located beside him during her Empathetic-DE.

My mate got up at 6:00 AM, February 27, 1981, went downstairs, washed up, put on the teakettle, went in the living room, sat down on the davenport, died of a massive coronary, and instantly "departed." No sound, no struggle; yet I "knew" – instantly. I raced downstairs, went to him, and "went with him" through the tunnel, to the Light. He "went through" the veil or membrane; I was stopped by "the voice" and sent back, with a message. I did not want to come back at that moment. A lifetime was crowded into seconds, yet it was comfortable and "uncrowded": timeless – more than that! My thoughts were speeded up and different. I was "home," and knew everything I had known forever. The joy, peace, love, warmth are not describable; joy beyond words. I was home, at one with God, love, self. I was totally alive, without the physical body, aware of all senses. I encountered "the voice": warm, soft, loving, gentle, kind, yet loud and booming, firm and commanding, who said, as I was about to go through, "Stop, stop, Margaret Helen. You must go back; you must go back now. My children need you; you have my work to do." I sensed the presence and saw the spirit of my friend, others, all sending me back, yet filling me full of a love beyond description: forgiven and loved, but sent back!¹³⁵

This experience is remarkable in that it captures so many aspects of Empathetic-DE's and NDE's: the sense of ineffability; the call to attend to the decedent (she "knew"); the tunnel and the light; heightened mental acuity; the presence of a spiritual being; a border; the desire to continue through the "membrane" but being sent back. Indeed, it appears to be almost identical to my experience, other than my being present prior to the accident and the veridical aspect of viewing the scenes. It is also interesting that the "voice" made it very clear that Margaret Helen still had work to do with the voice's "children." (The

¹³⁵ Greyson, "Case 616."

case file I was sent unfortunately did not contain information as to Margaret Helen's religious beliefs or practices.)

Mrs. Storey's account is a good example of my qualitative categorization method. Mrs. Storey was the twin sister of a man killed in a railroad accident who dreamt of her brother's death in great detail as it was actually happening.¹³⁶ During the dream, she called out to try to warn her brother and "*some one*" answered her; this occurred several times, even helping her identify someone else on the train who she knew. Eventually the "*some one*" said, "Now I'm going." Then Mrs. Storey witnessed two pale figures leading her brother away. Similar to other reported spiritual presences, "the voice of the *some one* seemed *always above* the figure of William" that she saw as well as above herself. The narrative contains fewer NDE-like features than most Empathetic-DE's; while Mrs. Storey witnessed the interaction between her brother and spiritual presences and heard a "Voice," she did not see her brother ascending a stairs or entering a light, did not reach a border, there was no life review, etc. Yet, this veridical event was experienced by the observer contemporaneously with the decedent's death and contained such detailed and correct information that it classifies as an Empathetic-DE.

3.3.2 Empathetic Life in Review

The life in review appears to be the one of the most common type of empathetic experience. One interesting aspect of these seemingly joint reviews is the utter lack of any sense of embarrassment at observing intimate elements of the deceased's life. Susan was present at her adult son's death from cancer. She was "swept up in a cloud" with him and witnessed his life-in-review, including numerous events of which she was

¹³⁶ Gurney, Myers and Podmore, *Phantasms of the Living*, 370.

unaware but later confirmed. Referring to her son's "private events," Susan stated, "I wasn't embarrassed in the least by anything I saw."¹³⁷

Dana's experience, in which she knew that her husband was dying with terminal lung cancer and was physically located beside him, is another example of an Empathetic-DE in which a life-in-review of the deceased person was the dominant feature.

When [Johnny] died, I was holding him and experienced an electric-like shock, after which they were immersed in a "bright, white light. Everything we ever did was there in that light. . . I saw him doing things before we were married. You might think that some of it might be embarrassing or personal, and it was. But there was no need for privacy, as strange as that might seem. . . Still, I saw him with girls when he was very young. Later I searched for them in his high school yearbook and was able to find them, just based on what I saw during the life review during his death. . . The child that we lost to a miscarriage when I was still a teenager stepped forward and embraced us. . . The upshot of her being there was that any issues we ever had regarding her loss were made whole and resolved.¹³⁸

Once again, an empathetic life in review emerges as a fascinating aspect of the narrative. While it was Dana's body that suffered the physical miscarriage, the memory/child presented as part of Johnny's life review.

A life in review of the decedent, witnessed by the Empathetic-DE'r, is an aspect of the Empathetic-DE that should be further studied because it is so, frankly, odd. It also highlights the distinctive role of a preexisting empathetic relationship in DRE's, leading to a recognition of its agency in Coincidental-DE's and NDE's as well as Empathetic-DE's.

¹³⁷ Moody and Perry, *Glimpses of Eternity*, 10.

¹³⁸ Moody and Perry, *Glimpses of Eternity*, 11-12.

3.3.3 Presence of Other, Often Related, Spiritual Beings

The presence of a welcoming familial member or close friend is another common aspect of Death-Related Experiences appearing in numerous NDE, Coincidental-DE, and Empathetic-DE narratives. In Dana's narrative, she encounters the baby that she miscarried, who appears as an immediately recognizable, but much older, child. (In itself, this is utterly fascinating: how could Dana recognize a child that she never "met;" why would the child appear older and not as a baby?)

3.4 Relationship to the Decedent

A strong emotional connection with the person dying is a very common characteristic of Empathetic-DE's. Indeed, as I have yet to find an Empathetic-DE narrative in which the participants were not extremely emotionally connected, I would suggest that it is a requirement for an Empathetic-DE. Yet, emotional connection alone is apparently not sufficient for an Empathetic-DE. One anonymous Empathetic-DE'r had an out-of-body experience, accompanying his wife as she died through a tunnel to a light. He hoped to have a similar experience when his mother died, but that did not occur.¹³⁹

3.4.1 The Call

The Call appears to have been present in both my and Margaret Helen's narratives. However, I suggest that the Call need not be sent out only by dying persons, In my case, I was "called" prior to my father realizing that he was going to die in an unexpected car accident. As noted, I believe that I was brought to the location moments before the event occurred; the Call originated from elsewhere, not my father. In cases of precognitive awareness of another's sudden death, I think that the Call is similarly issued

¹³⁹ Moody and Perry, *Glimpses of Eternity*, 33.

by a consciousness that is not the decedents. I also suggest that the Call appears in Coincidental-DE reports where the narrator sees an image, or hears the voice of, the departed person.

In some narratives, the Call is treated as precognition, but it is clearly more than that—it is a call to action. I thus suggest that the Call should be treated as a new feature of the Death-Related Experience narrative, and included in a new DRE Scale.

3.5 Distressing Empathetic-DE's

While the discovery of a loved one's death would seem to be a terrible, if not terrifying, experience, I have not found an Empathetic-DE (or a Coincidental-DE) that was in itself distressing. The absence of distressing elements is somewhat surprising as an Empathetic-DE bears so many similarities to a NDE, some of which contain upsetting elements.¹⁴⁰ The distinction suggests the need for research that explores whether distressing Empathetic-DE's do, in fact, occur. This information might help answer questions as to the nature of distressing NDE's. For example, whether the negative feelings are generally resolved within the NDE itself or whether the distress results from, or is magnified by, aftereffects of the experience, such as difficulty psychologically integrating the phenomena.

3.6 Conclusion

Table 4, below, summarizes my suggested categorization. It indicates the distinctions between the three groupings in terms of whether the experiencer is dying or in imminent fear of death (a NDE'r); if the experiencer is undergoing and narrating the

¹⁴⁰ Distressing NDE's are discussed more completely in Chapter 1.

experience during the permanent death of another (a Coincidental-DE'r or Empathetic-DE'r); and whether the narrator accompanies a decedent person through their permanent death process while witnessing phenomena that are features of a NDE.

Table 4: A New Categorization of Death-Related Experiences

TYPE	EXPERIENCER	LOCATION	CHARACTERISTICS	RESULT
NDE (Near-Death Experience)	Narrator clinically dead and revived, or in imminent fear of death	Where death is occurring; most studies in hospital setting	OBE or veridical OBE; sense of joy, peace, ineffability; the tunnel and the light; heightened mental acuity; the presence of a spiritual being; desire to continue through the border but being sent back; life in review.	Narrator survives. Sole experimenter of event.
Coincidental- DE (Coincidental- Death Experience)	Narrator neither clinically dead nor in imminent fear of death	Historically, subject at separate location from dying person. More contemporary accounts have subject at deathbed or aware of impending death	Visual and non-visual changes in decedent's room prior to or at time of death; presence of spirits; the "Call"; biological and/or empathetic relationship between decedent and Coincidental-DE'r	Narrator survives; person dying remains dead. Numerous people can have Coincidental- DE's upon the death of a single person.
Empathetic-DE (Empathetic- Death Experience)	Narrator neither clinically dead nor in imminent fear of death	Is not aware of, or is not necessarily near, impending death of other person	Mirror NDE: unconscious (dreaming) or conscious awareness of decedent's passing; veridical OBE; sense of joy, peace, ineffability; the tunnel and the light; heightened mental acuity; the presence of a spiritual being; desire to continue through the border but being sent back; the decedent's life in review; the call to attend to the decedent.	Narrator survives; person dying remains dead. Apparently only one person can have an Empathetic-DE upon the death of a single person.

The importance of segregating NDE's, Coincidental-DE's and Empathetic-DE's becomes clearer when the categories are viewed through the lenses of the different types of discourse surrounding the general topic of near-death experiences. Categorization is essential not just to comparison, but to reflexivity. Why study these profound phenomena that are greatly transformative for those experiencing them if we cannot, or do not, wrestle with the consequent implications for each discourse as well as for

ourselves? This requires understanding that the very act of attempting any epistemic analysis will necessarily bring our cultural beliefs into play. Whether the purpose of a discourse is ontological, epistemological or purely descriptive, it necessarily reflects the underlying biases respective to those discursive purposes. Simply evaluating discourses reflexively leads to insights regarding the beliefs underlying the discourses, beliefs which are not static but historical and transitional. For example, I emerged from my Empathetic-DE with strong beliefs about life and death, as well as a conviction that I was solely responsible for my family's wellbeing, no matter what the cost. I unwittingly maintained an ontological and moral viewpoint of the experience and, not recognizing that, my consequent personal decisions were made through a very restrictive lens. Frankly, it is only because of this categorization method that I have come to realize what my internal discourse, beliefs and biases were with respect to DRE's—and how they have affected my life.

With regard to phenomena that most people perceive as “events deemed religious,” such constructional beliefs are historical, transitional and part of the integrative mechanism allowing us to produce culturally-appropriate narratives. Medical research, however, ignores these narratives because its fundamental objective is to produce a theory of uniform cause and effect; something that a narrative-based methodology will never be able to accomplish. Consequently, neurological studies attempt to mimic the characteristics of NDE's, theorizing that similar traits have their genesis in specific physical locations of the enclosed brain. The next chapter will examine the physical materialist, neurobiological approach that argues NDE's result from comprehensible brain activity during the death process.

Chapter 4: Medical Research into NDE's— The Physicalist, Materialist Approach

4.1 Introduction

Apart from a few theories regarding NDE's as due to psychopathological conditions, medical research on NDE's are generally conducted by neurologists and almost exclusively focus on physiological changes in brain functions occurring during a NDE. Other than a few “converts” to a non-physicalist theory of consciousness (such as Drs. Bruce Greyson and Pimm van Lommel), most researchers take a physicalist or viewpoint, and apply a reductionist methodology, towards NDE studies.¹⁴¹ The first part of this chapter will briefly review the features of some NDE's that have been associated with psychopathological states. Following that, I review the neuroscientific research by grouping the medical studies of NDE's into three categories. The first group is composed of patients who have experienced NDE's or NDE-like events while undergoing general anesthesia or cardiac arrest. The second group of studies postulate a neuroanatomical cause of NDE's, attempting to understand what areas of the brain may be disrupted by conditions such as epilepsy and migraine. The final collection of research explores neurochemical reactions triggered by either medication or by psychedelic substances. All of these studies essentially hypothesize that NDE's are due to causally-similar disruptions in ‘normal’ brain activity that is created during the death process; that is, that NDE's are

¹⁴¹ “Physicalism is the thesis that everything is physical, or as contemporary philosophers sometimes put it, that everything supervenes on the physical.” <https://plato.stanford.edu/entries/physicalism/> It might be seen as the descendent of materialism. Materialism is defined herein as “the belief that only physical matter exists and the spiritual world does not.” <https://dictionary.cambridge.org/us/dictionary/english/materialism>. Reductionism, as used herein, refers to a tendency to provide explanations by breaking down complex events into increasingly small parts; reductionism is a methodology that often accompanies physicalism and materialism.

produced through “abnormal activity of the limbic system or the temporal lobes.”¹⁴² Thus, the fundamental concept underlying these ontologies is that NDE’s result from abnormal neurological processes accompanying the death process that may, in some cases, be similar to neurological alterations arising from disease (such as epilepsy) or psychosis. It is not clear that NDE characteristics result from brain activities linked to dying or that the NDE promotes the unusual brain activity. Consequently, we should be wary of the logical fallacy *cum hoc ergo propter hoc*. Even if unusual brain activity—diseased or otherwise—accompanies electrical or chemical stimulations, that does not mean that such stimulation is what causes the activity. This chapter will review these theories, starting with the psychological explanations and then moving to the physiological ones, and evaluate them in the context of the categorization methodology previously discussed.

4.2 Psychopathological Conditions

Some researchers have argued that certain psychopathological states share attributes of NDE’s and that, therefore, NDE’s may be ascribed to these psychological conditions. One is depersonalization, which is defined as “a feeling of strangeness of unreality, that mimics a state of death and serves as a sacrifice of a part of the self to avoid actual death”.¹⁴³ Against this argument, many NDE’rs report hyperacuity, a mystical consciousness, and a gratifying experience, none of which are seen in depersonalization.¹⁴⁴

¹⁴² Bruce Greyson, Emily Williams Kelly and Edward F. Kelly, “Explanatory Models for Near-Death Experiences,” in *The Handbook of Near-Death Experiences: Thirty Years of Investigation*, eds. Janice Miner Holden, Bruce Greyson and Debbie James (Santa Barbara: ABC-CLIO, 2009), 213-234, 219.

¹⁴³ Bruce Greyson, “An Overview of Near-Death Experiences,” in *The Science of Near-Death Experiences*, ed. John C. Hagan (Columbia: University of Missouri Press, 2017), 19-28, 24.

¹⁴⁴ Greyson, “An Overview of Near-Death Experiences,” 24.

A second is dissociation, or “the separation of thoughts, feelings, or experiences from the normal stream of consciousness and memory that is an adaptive response to trauma common in otherwise normal people.”¹⁴⁵ It is correct that disassociative symptoms are higher among NDE’rs than in “non-experiencers,” but the percentage is still among the normal population range. Thus, Greyson argues that the “disassociative symptom profile of NDErs is suggestive of a normal psychophysiological response to stress, rather than a pathological type of disassociation or a manifestation of dissociative disorder.”¹⁴⁶ Martial, et al, assume that NDE’s are physiologically-based and conclude an evolutionary rationale for the affect of disassociation; “to face with those potentially dangerous situations, humans can develop various adaptive mental and physical responses, including dissociation.”¹⁴⁷

A third suggested psychopathological condition is post-traumatic stress disorder, which symptoms include “recurrent, intrusive recollections . . . recurrent, distressing dreams . . . diminished interest in previously important activities, estrangement from others, and a sense of foreshortened future”.¹⁴⁸ Similarly, Greyson contends that NDE’rs display of such symptoms is within the normal range and “far below” those see in clinical PTSD, concluding that the “NDErs profile [of PTSD symptoms] is typical of a nonspecific response to catastrophic stress rather than of PTSD.”¹⁴⁹ Interestingly, in a study conducted on psychiatric outpatients who had come close to death, every measure of psychological distress was ranked lower for those who reported NDE’s as compared to

¹⁴⁵ Greyson, “An Overview of Near-Death Experiences,” 25.

¹⁴⁶ Greyson, “An Overview of Near-Death Experiences,” 25.

¹⁴⁷ Charlotte Martial, Vanessa Charland-Verville, Hélène Cassol, Vincent Didone, Martial van Der Linden, and Steven Laureys. “Intensity and Memory Characteristics of Near-Death Experiences.” *Consciousness and Cognition*, 56 (2017), 120-127, 122. <http://dx.doi.org/10.1016/j.concog.2017.06.018>

¹⁴⁸ Greyson, “An Overview of Near-Death Experiences,” 25.

¹⁴⁹ Greyson, “An Overview of Near-Death Experiences,” 25.

those who had not. This conclusion actually suggests that NDE's might help lessen the distress associated with severe mental illness, rather than NDE's occurring as a symptom of psychopathological conditions.¹⁵⁰

Studies have found NDE'rs to be as psychologically healthy as compared with a control group of non-NDE'rs, although the NDE'rs are more likely to display certain aptitudes and insights. According to Greyson, the two groups are

comparable in intelligence, neuroticism, extraversion, trait and state anxiety, and Rorschach indicators of openness to unusual experience. However, there are some data suggesting that near-death experiencers do differ from comparison groups in some psychological traits. Experiencers tend to be good hypnotic subjects, remember their dreams more often, and are adept at using mental imagery. They also tend to acknowledge significantly more childhood trauma and resultant tendencies to feel detached from one's surroundings than do non-experiencers. It is unclear, however, whether these personal traits and recall of prior experiences are aftereffects of NDEs or whether they are differences that preceded the NDEs and may in fact have facilitated them.¹⁵¹

Consequently, it appears that a particular psychological state is not a precondition for a NDE. The more interesting question, I think, is whether the certain psychological traits listed above were present prior to the NDE or not; if so, could they have intensified the experience; were any preconditions magnified following the experience; and do they play any role in any resistance, or lack thereof, felt by a NDE'r with regard to sharing the event with others. Little research has been done in this area to date.

4.3 Physiological Theories: Brain Processes Creating Consciousness

Medical research often defines itself through its methodology; a good study is one in which results can be duplicated and a ontological hypothesis may be applied. This "scientific method" is rarely questioned, nor are any related biases present among the

¹⁵⁰ Greyson, "An Overview of Near-Death Experiences," 26.

¹⁵¹ Greyson, "Western Scientific Approaches to Near-Death Experiences," 777.

protocols, the study groups, or the researchers disclosed or even assumed. With respect to NDE's, medical research presumes to answer the complex question of the Hard Problem of Consciousness, or “why and how do physical processes in the brain give rise to conscious experience?”—without acknowledging that science has not been able to explain consciousness. The question of how consciousness is constituted comes into direct play in the next two subsections, which examines the debate regarding the possibility of consciousness during general anesthesia and cardiac arrest.

4.3.1 Consciousness During General Anesthesia

The medical literature displays a strong disagreement as to whether or not conscious perceptions might occur while under general anesthesia, and if so, whether those events might be qualified as OBEs or some other NDE characteristic.

Neuroscientists Blanke, Faivre and Dieguez argue that, while OBE's are “quite rare during general anesthesia, . . . [different studies have indicated that] auditory perceptions (89%), sensations of paralysis (85%), motor illusions and bodily transformations (30-40%), and pain (39%)” are common.”¹⁵² Visual perceptions were reported in only 27% of patients, “many” of whom described seeing people in the operating room (although it is unclear whether these descriptions were accurate). Blanke et al. conclude that

if analyzed only with respect to the presence of visual awareness and experiences in the context of general anesthesia, OBEs and OB-like experiences are not so rare . . . [and suggest] that OBEs under general anesthesia might be related to the functional and anatomical pathomechanisms as described in neurological patients with epilepsy, migraine, and cerebrovascular disease.¹⁵³

¹⁵² Blanke, Faivre and Dieguez, “Leaving Body and Life Behind,” 328.

¹⁵³ Blanke, Faivre and Dieguez, “Leaving Body and Life Behind,” 328.

This conclusion, which would be arguable only for OBEs under general anesthesia and does not account for other common features of a NDE, again points to a dysfunctional brain as the source of OBEs and NDE-like events.

In contrast, researchers such as Greyson point out that conscious experience is generally explained physically as “coherent high-frequency EEG oscillations linking widely separated regions of the brain.”¹⁵⁴ EEG’s conducted under normal conditions support this thesis. However, the

conventional *interpretation* of this correlation—that the neuroelectric activity itself generates (or *is*) the conscious experience—cannot explain how, in both general anesthesia and cardiac arrest, the neuroelectric conditions that are held to be necessary for conscious experience are abolished, and yet, vivid, even heightened, awareness, thinking, and memory formation can still occur.¹⁵⁵

In other words, if neuroelectric activity is responsible for consciousness, and if such activity is diminished or suppressed, how does consciousness continue? Moreover, how do the narratives of NDE’rs, relating enhanced mentation, veridical OBE’s, and meeting deceased relatives (sometimes unknown to them), tally with a loss of consciousness? Even if neuroimaging studies indicate that specific areas of the brain are more active in response to a certain thought or feeling, this does not “prove” that the cells also produce the thoughts.¹⁵⁶ “A correlation does not elucidate anything about cause or result, and how should ‘unconscious’ matter like our brain ‘produce’ consciousness, while the brain is only composed of atoms and molecules in cells with an abundance of chemical and electrical processes?”¹⁵⁷

¹⁵⁴ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experience,” 226.

¹⁵⁵ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experience,” 226.

¹⁵⁶ Pim van Lommel, “Near-Death Experiences: The Experience of the Self as Real and not as an Illusion,” *Annals of The New York Academy of Sciences* (2011): 1-10, 6.

¹⁵⁷ van Lommel, “Near-Death Experiences: The Experience of the Self,” 6.

A technological limitation also exists with the use of EEG's to measure brain wave activity. "The EEG detects only activity common to large populations of neurons in the cerebral cortex" and studies indicate that brain waves can appear subcortically or near the ventricles, or may be highly localized and not detected.¹⁵⁸ Consequently, a flat-line EEG might not reflect true activity of the brain undergoing a death process. Not only does this fact render EEG-based conclusions as questionable, but it also raises the question as to *what* sort of brain activity, which may go undetected by EEG's, contributes to consciousness.

4.3.2 Consciousness During Cardiac Arrest

Most NDE studies are defined as retrospective; they are conducted via interviews and questionnaires sometimes many years after the event, are self-reported and tend to attract participants who believe that they had a NDE. In other words, there is a significant risk of self-selection among the participants such that only those who had positive NDE's taking part in the studies. However, in 2001, cardiologist Pim van Lommel, et. al., published the results of an unusual large scale study that interviewed all 344 patients who suffered cardiac arrest and were resuscitated in ten different hospitals over four years.¹⁵⁹ Ring's WCEI was used to determine who had a "core experience." The results included data from both people who had NDE's (62 or 18%) and those who did not (282 or 82%), with the interviews being conducted as close to the cardiac event as

¹⁵⁸ Greyson, Kelly and Kelly, "Explanatory Models for Near-Death Experience," 227.

¹⁵⁹ Pim van Lommel, Ruud van Wees, Vincent Meyers, and Ingrid Elfferich, "Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in the Netherlands," *The Lancet* 358:9298 (2001): 2039-2045. A smaller prospective study conducted by Greyson (2003) on 116 survivors of cardiac arrest reported 9.5% with a core NDE and 6% a "superficial NDE." Bruce Greyson, "Incidence and correlates of near-death experiences in a cardiac care unit." *General Hospital Psychiatry* (2003): 269-276.

possible.¹⁶⁰ This method thus avoided the potential for self-selection that might be present in research approaches that rely upon public requests for volunteers. The study took into account demographic, medical, pharmacological, and psychological data between patients who reported NDE's and those who did not after resuscitation. If they agreed, the NDE'rs were reinterviewed at two and eight-years post event, establishing a longitudinal framework for long-term transformative changes. The abstract summarized their findings:

62 patients (18%) reported NDE, of whom 41 (12%) described a core¹⁶¹ experience. Occurrence of the experience was not associated with duration of cardiac arrest or unconsciousness, medication, or fear of death before cardiac arrest. Frequency of NDE was affected by how we defined NDE, the prospective nature of the research in older cardiac patients, age, surviving cardiac arrest in first myocardial infarction, more than one cardiopulmonary resuscitation (CPR) during stay in hospital, previous NDE, and memory problems after prolonged CPR. Depth of the experience was affected by sex, surviving CPR outside hospital, and fear before cardiac arrest. Significantly more patients who had an NDE, especially a deep experience, died within 30 days of CPR ($p < 0.0001$). The process of transformation after NDE took several years, and differed from those of patients who survived cardiac arrest without NDE.¹⁶²

Cardiac arrest results in instantaneous circulatory arrest and cerebral functioning ceases within a few minutes.¹⁶³ The NDE features of hyperacuity, vivid sensory images, distinct memory of the experience, and a sense of 'realness,' would not seem possible under extremely reduced cerebral functioning. As summarized by the researchers,

[o]ur results show that medical factors cannot account for occurrence of NDE; although all patients had been clinically dead, most did not have NDE. Furthermore, seriousness of the crisis was not related to occurrence or depth of

¹⁶⁰ Timing of the interviews were dependent upon the post-arrest condition of the patient. Seventy-four percent of the patients were interviewed within 5 days of CPR, the remainder within 70 days. Pim van Lommel, et al, "Near-Death Experience in Survivors of Cardiac Arrest," 2040.

¹⁶¹ While van Lommel, et al., do not specify what score on the WCEI constitutes a core experience in their study, most studies rank the following four characteristics as indicative of a defining NDE: OBE's, seeing a bright light, encountering entities, and strong feelings of peace. See, e.g., Lake, "The Near-Death Experience (NDE) as an Inherited Predisposition," 135.

¹⁶² van Lommel, et al., "Near-Death Experience in Survivors of Cardiac Arrest," 2039.

¹⁶³ Greyson, Kelly and Kelly, "Explanatory Models for Near-Death Experiences," 227.

the experience. If purely physiological factors resulting from cerebral anoxia caused NDE, most of our patients should have had this experience. Patients' medication was also unrelated to frequency of NDE. Psychological factors are unlikely to be important as fear was not associated with NDE.¹⁶⁴

Indeed, the authors conclude that, while “neurophysiological factors must play some role” in NDE’s, their research did not show that “psychological, neurophysiological, or physiological factors caused these experiences after cardiac arrest.”¹⁶⁵ There was simply no correlation between the people who experienced NDE’s and those who did not in terms of the duration of the cardiac arrest or of coma, in the use of sedatives or painkillers, a psychological cause such as fear of death, whether the patients had preexisting religious beliefs, or if they had heard of the concept of NDE’s prior to the experience.¹⁶⁶

The van Lommel et al.’s study was noteworthy for its longitudinal findings regarding memory and transformational changes that were based on surveys done two- and eight-years after the fact. The initial examinations indicated that “[p]atients with memory defects after prolonged resuscitation reported fewer experiences than other patients in our study.”¹⁶⁷ However, among those who had NDE’s, no relationship was found between the frequency or depth of the experience and the time between CPR and the survey. Essentially, events linked to the resuscitation may have caused experiences to be forgotten, but if a NDE occurred, then the memory of it remained strong. Such recollections remained vivid years later, and apparently resulted in long-term changes in personal growth and religious or spiritual beliefs. The “surprising and unexpected

¹⁶⁴ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2043.

¹⁶⁵ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2044.

¹⁶⁶ van Lommel, “Near-Death Experiences: The Experience of the Self,” 3.

¹⁶⁷ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2043.

finding” of a long-term transformational effects of NDE’s are summarized in Table 5, below, which exhibits the results of interviews conducted two and eight years following the initial surveys.¹⁶⁸

Table 5: Total Sum of Individual Life-Change Inventory Scores of Patients at 2-year and 8-year follow-up¹⁶⁹

Life-change inventory questionnaire	2-year follow-up		8-year follow-up	
	NDE (n=23)	no NDE (n=15)	NDE (n=23)	no NDE (n=15)
Social attitude				
Showing own feelings	42	16	78	58
Acceptance of others	42	16	78	41
More loving, empathic	52	25	68	50
Understanding others	36	8	73	75
Involvement in family	47	33	78	58
Religious attitude				
Understand purpose of life	52	33	57	66
Sense inner meaning of life	52	25	57	25
Interest in spirituality	15	-8	42	-41
Attitude to death				
Fear of death	-47	-16	-63	-41
Belief in life after death	36	16	42	16
Others				
Interest in meaning of life	52	33	89	66
Understanding oneself	58	8	63	58
Appreciation of ordinary things	78	41	84	50

NDE=near-death experience. The sums of all individual scores per item are reported in the same 38 patients who had both follow-up interviews. Participants responded in a five-point scale indicating whether and to what degree they had changed: strongly increased (+2), somewhat increased (+1), no change (0), somewhat decreased (-1), and strongly decreased (-2). Only in the reported 13 (of 34) items in this table were significant differences found in life-change scores in the interview after 2 years (table 4).

These findings indicate that the psychological effects of NDE’s take a number of years to integrate, presumably due to both internal cognitive processes and to the often negative social responses NDE’rs experience when voicing their tales. Consequently, many people may deny or repress their narratives to avoid appearing irrational or mentally ill;

¹⁶⁸ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2043.

¹⁶⁹ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2042.

“[t]hus, social conditioning causes NDE to be traumatic, although in itself it is not a psychotraumatic experience.”¹⁷⁰ As van Lommel later noted,

An NDE is an unforgettable confrontation with unlimited dimensions in our consciousness. As long as one has not experienced an NDE, it seems that it would be impossible to really understand the impact and the life-changing after effects of this overwhelming experience. The existing worldview has radically changed. One person said, “It felt as if I had become another person but with the same identity.” The integration and acceptance of an NDE is a process that may take many years, with feelings of depression, homesickness, and loneliness, because of its far-reaching impact on people’s pre-NDE understanding of life and value system. Finally, it is quite remarkable to see that a cardiac arrest, which lasts just a few minutes, give rise to such a lifelong process of transformation.¹⁷¹

4.4 NDE Features as a Result of Neurological Impairments

Almost all neurological research falls into two areas, either abnormal electrical activity in certain regions of the brain or the influence of neurochemicals produced at the time of death. More recent research has expanded the latter to look at the effects of psychotropics in mimicking NDE traits.

4.4.1 Abnormal Temporal Lobe and TPJ Activity

A number of neuroscientific researchers have compared NDE features to mental phenomena experienced by patients suffering from temporal lobe epilepsy, often citing older studies involving electrical stimulation of the neocortex because such activity can produce a sense of “leaving the body.”¹⁷² Neurosurgeon Wilder Penfield argues that the “mystical visions, out-of-body sensations, panoramic memories, and vivid hallucinations” that accompanies electrical stimulation of the cortex is very similar to NDE’s.¹⁷³ Greyson et al. point out that the experiences reported by the patients

¹⁷⁰ van Lommel, et al., “Near-Death Experiences in Survivors of Cardiac Arrest,” 2043.

¹⁷¹ van Lommel, “Near-Death Experiences: The Experience of the Self,” 4.

¹⁷² Greyson, “Western Scientific Approaches to Near-Death Experiences,” 780.

¹⁷³ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experiences,” 219.

undergoing either electrical stimulation or epileptic seizures primarily consist of short auditory sequences, experiencing negative emotions such as fear, or seeing hallucinatory imagery, all of which are uncommon in NDE narratives. Brief or singular memories experienced during temporal lobe stimulation also stand in contrast to the movie-like narratives expressed by NDE'rs who experience a life in review. Moreover, the great majority of temporal lobe epileptics do not report OBE's or NDE's at all.¹⁷⁴

Studying the occurrence of out-of-body experiences in patients with brain lesions, Blanke et al. focused on a particular area in the neocortex at the junction of the temporal lobe and the parietal cortex (the "TPJ"), an area that is thought "to be involved in the integration of vestibular information [i.e., spatial orientation] with tactile, proprioceptive, and visual information regarding the body and its location in perceptual space."¹⁷⁵

Arguing that OBE's are the most common aspect of NDE's, the group extended their OBE research to propose two different types of NDE's based on which hemisphere was believed to be injured.¹⁷⁶ They conclude that

there is also no reason to assume that an NDE is just one phenomenon, but rather a group of loosely associated experiences due to interference with different brain functions and brain mechanisms. . . . we propose that future studies on NDEs may want to focus on the functional and neural mechanisms of NDE phenomena in patient populations as well as healthy subjects. This might eventually lead to the demystification of NDEs, at least partly. More importantly, the scientific study of

¹⁷⁴ Greyson, Kelly and Kelly., "Explanatory Models for Near-Death Experiences," 221.

¹⁷⁵ Blanke, Faivre and Dieguez, "Leaving Body and Life Behind," 323-330. See also Greyson, et al., "Explanatory Models for Near-Death Experiences," 221.

¹⁷⁶ "We propose that type 1 NDEs are due to bilateral frontal and occipital, but predominantly right hemispheric brain damage affecting the right TPJ and characterized by OBEs, altered sense of time, sensations of flying, lightness, vection and silence. Type 2 NDEs are also due to bilateral frontal and occipital, but predominantly left hemispheric brain damage affecting the left TPJ and characterized by feeling of a presence, meeting of and communication with spirits, seeing of glowing bodies, as well as voices, sounds, and music without vection. We expect emotions and life review (damage to unilateral or bilateral temporal lobe structures such as the hippocampus and amygdala) as well as lights and tunnel vision (damage to bilateral occipital cortex) to be associated with type 1 and type 2 NDEs alike." Blanke, Faivre and Dieguez, "Leaving Body and Life Behind," 342.

these varied complex experiences may allow studying the functional and neural mechanisms of beliefs, personality, spirituality, and self that have and will continue to intrigue scientists, scholars, and laymen alike.

Thus Blanke et al. attribute all out of body experiences to defects in “paroxysmal cerebral dysfunction of the TPJ” during a period of impaired consciousness.¹⁷⁷ This conclusion has been criticized by Greyson and others for being too broad for several reasons. First, seizures are located in more diffuse areas of the brain than just the TPJ. Second, many people who experience OBE’s show no indication of brain abnormalities. Third, the fact is that seizures and direct stimulation *disrupt* patterns of neuroelectric activity but do not *create* them as would appear to be necessary for an out-of-body-experience.¹⁷⁸ In fact, “the vast majority of people with temporal lobe seizures do not report OBEs.”¹⁷⁹ Once again, I would raise the *cum hoc* warning... stimulating the TPJ might produce auditory hallucinations such as hearing music, but that does not mean that every time you hear music you are hallucinating.

Most strikingly, a paradox exists between the heightened senses and recall narrated by NDE’rs and the loss of consciousness that would normally be expected as a result of abnormal brain activity. Those who suffer epileptic seizures also generally evince the same issues of memory impairment suffered by cardiac arrest patients, yet the latter’s memories of the NDE remains vivid. As Greyson, et al. reiterate, it is a “fact that memory under such conditions [of loss of consciousness] is ordinarily seriously impaired.”¹⁸⁰ This paradox becomes particularly apparent with NDE’s that involve veridical perceptions regarding circumstances surrounding the death event.

¹⁷⁷ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experiences,” 221.

¹⁷⁸ Greyson, Kelly and Kelly, “Explanatory Models, for Near-Death Experiences,” 221, emphasis mine.

¹⁷⁹ Greyson, “Near-Death Experiences,” 30-31.

¹⁸⁰ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experiences,” 228..

4.4.2 Neurochemical Alterations

Some of the earliest neurological theories proposed that changing levels of gases in the brain during the death process—either decreased levels of oxygen or increased levels of carbon dioxide—resulted in hallucinations. These explanations have been rejected as (i) NDE features may be experienced by those who are not dying; (ii) some NDE’rs did not show any alterations in arterial gas levels; (iii) NDE’s would then be expected in substantially all people who experience death and show changed blood gas levels, but the majority of cardiac arrest patients do not report such experiences; (iv) studies of carbon dioxide levels of NDE’rs have been inconsistent, reporting higher, lower and stable levels; and (v) while no studies have shown decreased levels of oxygen during NDE’s, research has indicated increased levels associated with NDE’s.^{181,182}

Other researchers have suggested that NDE’s might be caused by medications given to dying patients, but (i) those ensuing visions generally involve living persons, unlike a NDE encounter with deceased persons; and (ii) dying patients who were given drugs or had fevers report fewer NDE’s than those without fevers or drugs.¹⁸³ In addition, medications, “altered body physiology and brain malfunctions generally produce clouded thinking, irritability, fear, belligerence, and idiosyncratic visions, quite unlike the exceptionally clear thinking, peacefulness, calmness, and predictable content generally seen in NDEs.”¹⁸⁴ Thus, the findings suggest the opposite of the neurochemical

¹⁸¹ Greyson, Kelly and Kelly, “Explanatory Models for Near-Death Experiences,” 217-218.

¹⁸² Moreover, as Greyson, Kelly and Kelly note, “decreased oxygen is a highly distressing experience, particularly for those who report perceptual distortions and hallucinations . . . , [which] contrasts markedly with NDEs, which are usually recalled as peaceful and positive experiences.” “Western Approaches to Near-Death Experiences,” 779.

¹⁸³ Greyson, Kelly and Kelly, “Western Scientific Approaches to Near-Death Experiences,” 780.

¹⁸⁴ Greyson, Kelly and Kelly, “Western Scientific Approaches to Near-Death Experiences,” 780.

hypothesis in that medications or physiological alterations actually appear to inhibit NDEs and/or their later recollection.¹⁸⁵

4.4.3 Psychotropic Substances

A fascinating area of relatively recent study is that of psychoactive drugs. Psychedelic substances appear to have been utilized for millennia to aid in expansion of consciousness, with effects that include OBE's, interactions with mystical beings, and feelings of cosmic unity. Consequently, they are being increasingly studied as a means of establishing a neurobiological basis for the occurrence of such events during NDE's. Some pharmacological substances that have been studied in NDE research include marijuana, opium, heroin, mescaline, ketamine, and lysergic acid diethylamide (LSD).¹⁸⁶

Ketamine, which has recently become popular in the treatment of depression and PTSD symptoms, has been linked to NDE-like events.^{187, 188} Ketamine blocks glutamate receptors known as N-methyl-D-aspartate (NMDA) receptors, which are necessary for functions such as memory and learning. A recent large scale study that examined 15,000 reports of usage of 165 psychoactive substances and 625 NDE narratives concluded that "NMDA receptor antagonist ketamine consistently resulted in reports most similar to those associated with NDEs [with] serotonergic psychedelics and deliriants constantly present[ing] smaller similarity."¹⁸⁹ The study relied on questionnaires and self-reported

¹⁸⁵ Greyson, Kelly and Kelly, "Western Scientific Approaches to Near-Death Experiences," 780.

¹⁸⁶ Blanke, Faivre and Dieguez, "Leaving Body and Life Behind," 327.

¹⁸⁷ Timothy Leary, known for his popularization of LSD, referred to ketamine experiences as "experiments in voluntary death." Charlotte Martial, Hélène Cassol, Vanessa Charland-Verville, Carla Pallavicini, Camila Sanz, Federico Zamberlan, Rocío Martínez Vivot, Fire Erowid, Earth Erowid, Steven Laureys, Bruce Greyson, and Enzo Tagliazucchi, "Neurochemical models of near-death experiences: A large-scale study based on the semantic similarity of written reports." *Consciousness and Cognition*, 69 (2019): 52-69, 53. <https://doi.org/10.1016/j.concog.2019.01.011>.

¹⁸⁸ Ornella Corazza, *Near-Death Experiences: Exploring the Mind-Body Connection*, (Abingdon: Routledge, 2008), 107-112.

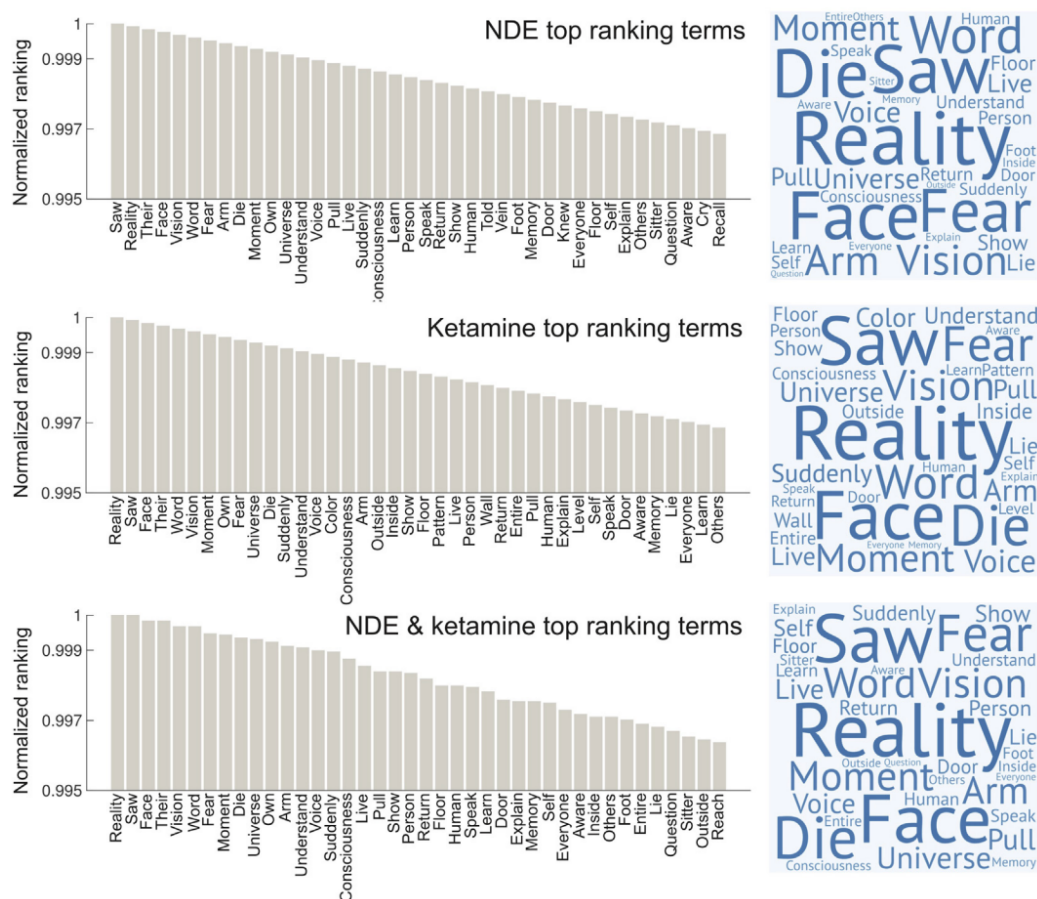
¹⁸⁹ Martial et al., "Neurochemical Models of Near-Death Experiences," 52.

narratives, comparing the frequencies of the top twenty words used in the documents. Based on these semantic similarities, Martial, et al. concluded that, among the studied substances, ketamine most consistently resulted in NDE-like descriptions of phenomenological features. Because NDE's occur cross-culturally, the authors hypothesize that a neurobiological basis underlies the NDE, and suggest that "endogenous NMDA antagonists with neuroprotective properties may be released in the proximity of death."¹⁹⁰ Table 6, below, summarizes their findings on semantic similarities using both graphs and word clouds. (The large occurrence of "Fear" in the NDE top ranking terms is surprising, as this is not a common feature either of most NDE's or of NDE studies. However, without further understanding of how they selected their data sets, I cannot account for it.)

¹⁹⁰ Martial, et al., "Neurochemical Models of Near-Death Experiences," 52.

Table 6: Lexical Similarity between NDE and Ketamine Reports.¹⁹¹

(The top two panels presents the 40 most frequent terms in the respective reports (word size weighted by the normalized ranking), and the third panel is based on average frequency across both sets of reports.)



This study is intriguing in its suggestion that ketamine-like substances might be released during death. Evidence was also drawn from trials that show that, if promptly administered after cerebral trauma, ketamine shows neuroregenerative and neuroprotective effects.¹⁹² Furthermore, certain types of epileptic attacks are associated with large glutamate release.¹⁹³ However, at least two issues remain with a neurochemical ontology of ketamine-induced NDE's. First, how does this model

¹⁹¹ Martial, et al., "Neurochemical Models of Near-Death Experiences," 59.

¹⁹² Martial, et al., "Neurochemical Models of Near-Death Experiences," 63.

¹⁹³ Martial, et al., "Neurochemical Models of Near-Death Experiences," 63.

explain NDE's that are triggered by a fear of death when brain cells are not under physiological stress? Second, if a neurochemical, endogenous ketamine-like compound released when dying is responsible for NDE's, shouldn't all patients who undergo cardiac arrest experience the same core phenomena?

In discussing neurochemical compounds, and ketamine in particular, van Lommel et al. point out the large discrepancies between those narratives and those of NDE'rs.

The ketamine-based

recollections, however, consist of fragmented and random memories unlike the panoramic life-review that can occur in NDE. Further, transformational processes with changing life-insight and disappearance of fear of death are rarely reported after induced experiences. Thus, induced experiences are not identical to NDE, and so, besides age, an unknown mechanism causes NDE by stimulation of neurophysiological and neurohumoral processes at a subcellular level in the brain in only a few cases during a critical situation such as clinical death. These processes might also determine whether the experience reaches consciousness and can be recollected.¹⁹⁴

Consequently, as with the other models, it appears to be inaccurate to ascribe ketamine-like substances as the cause of NDE's. Rather, it is quite possible that the release of such compounds may act as a result of a NDE, and, I suggest, may then increase the intensity of the core experience.

4.5 Conclusion

Medical research into NDE's reflect the continuing discourse between two groups of scientists. One, as exemplified by Olaf Blanke, believes that neurophysiological and neurochemical processes within the enclosed brain will eventually be proven to be the source of NDE features, which are the product of a diseased mind. The second

¹⁹⁴ van Lommel, et al., "Near-Death Experiences in Survivors of Cardiac Arrest," 2044.

contingent, as voiced by Bruce Greyson and Pim van Lommel, points out the inability of science to explain human consciousness, particularly during states of unconsciousness.

NDEs have proven particularly challenging to explain within a Western scientific paradigm, inasmuch as they involve vivid and complex thinking, perception, and memory formation under conditions in which current neuroscientific models of the mind deem such cognitive processes impossible, such as under general anesthesia and in cardiac arrest.¹⁹⁵

The physicalist, neurological viewpoint fails for several reasons. First, if the causes of NDE features are physiological or chemical brain alterations during the death process, then everyone who has those alterations—be they already present or intentionally created by researchers—should experience the relevant NDE characteristic. But this does not happen; all patients do not report the same experiences, and even among those who do report NDE-like features, the quality and intensity of the events are significantly different than those narrated by NDE'rs. Second, some NDE's arise during an imminent fear of death; under a physicalist model that presumes neuroanatomical causes resulting from the death process, such events are impossible unless the person already has a brain impairment such as epilepsy, which is not the case with most such NDE'rs. Third, we cannot ignore the potential *cum hoc* fallacy: "Correlating a brain state with an experience does not imply that brain states necessarily cause the experience; the brain state may alternatively allow access to or simply reflect the experience."¹⁹⁶ And finally, and most importantly with respect to my proposed categorization, a medical explanation cannot shed any light on the occurrence of Coincidental-DE's or Empathetic-DE's.

¹⁹⁵ Greyson, "Western Scientific Approaches to Near-Death Experiences," 777.

¹⁹⁶ Greyson, "Western Scientific Approaches to Near-Death Experiences," 7.

Moreover, as a point of ethical research methodology, the very basis of a reductionist approach may violate human experience: “The main problem with this approach is that the ‘objective’ measurements of the brain do not allow investigation of the ‘subjective’ aspects of the human experience. . . . [B]y not including the ‘subjective’ side of the experience in the reflection, we assume only a partial reflection and a question becomes disembodied.”¹⁹⁷ Essentially, the narrative component—what appears to integrate experience into consciousness—is ignored. This omission, I believe, is not just scientifically incorrect; it is ethically amoral as it denies the experience of being human.

Where medical explanations may be helpful is with the idea that certain neurobiological processes—be they electrical or neurochemical—may allow the brain to change in such a way that it can act as a form of biological modem receptive to unusual phenomena occurring outside the brain. For example, psychiatrist Karl Jansen has extensively studied ketamine effects on the brain. He proposes that ketamine acts to allow external electrical connections and receptions enter the physical brain; “the brain can act as a transceiver, converting fields beyond brain into features of the mind, in a manner similar to the way a television converts waves in the air into sound and vision.”¹⁹⁸ Presumably the level of consciousness alters in response to the chemical and permits incoming data that might otherwise be filtered into a different level or even rejected. In this view, Jansen echoes Myers’ suggestion that a relaxation of some filtering mechanism present in human consciousness might account for super normal events. However, medical research would then have to consider the possibility of an existing consciousness

¹⁹⁷ Corazza, *Near-Death Experiences*, 119-120.

¹⁹⁸ Karl L.R. Jansen, *Ketamine: Dreams and Realities*, Sarasota: Multidisciplinary Association for Psychedelic Studies, 2001, 116.

outside the brain, rather than produced by the brain; this is not the currently accepted neurological belief.

Conclusion

To date, studies of anomalous DRE's have universally treated them as unrelated events. NDE's have been examined separately; other super normal experiences—even if they involved NDE traits, such as OBE's or life in reviews—are viewed as unconnected phenomena. This paper has described a new method of categorizing Death-Related Experiences by classifying them in terms of the location of the narrator experiencing the event vis-à-vis the actual decedent or dying person. Distinguishing among NDE's, Coincidental-DE's, and Empathetic DE's permits comparison among the categories, with the result that the three types of DRE's appear to be related. One point of similarity in all cases appears to be the emotional connection between the person dying and the person having the experience. In a NDE, those are obviously one and the same although the experiencer may recount observing, and feeling affected by, the emotional reactions of others. In the other categories, it is rare to find a case where the persons are not related.¹⁹⁹ There appears to be an intensification of DRE features that results from a stronger emotional connection to the decedent. The more empathetic the relationship is, the more vivid the experience. The more amplified the experience, the more personally transformative it is.

I view DRE's as phenomena entangled within spaces of first-person consciousness. Thus, I believe it is critical to accept experiencers' reports as "true," without attempting to force a medical explanation that postulates NDE's as resulting from

¹⁹⁹ There are cases in which the experiencer is close (e.g., a spouse) to someone who knows the decedent. These narratives are particularly fascinating because of the possibility of entanglement with others *through* someone else.

of neurochemical or neuroelectrical activities produced by a purely localized brain at or near the time of death. With respect to NDE's, the data indicates that, even if neurological manipulations produce similar effects, the experiences are qualitatively different and do not produce the predominant effect of long-term transformation in its experiencers. The materialist, medical viewpoint is particularly obvious with respect to those recollections from Coincidental-DE's and Empathetic-DE's in which the medical explanations are moot. Science tends to ignore those stories. As a result, I believe that the failure of medical research to recognize Coincidental-DE's and Empathetic-DE's as credible, phenomenologically-based narratives casts a shadow on the ability of contemporary scientific knowledge to explain any of the related DRE's.

My concept for a new categorization method for DRE's is dependent upon a radically inclusive empiricism that accepts first-person narratives, evolving scientific methods and technology, and comparativism. To this end, I would hope to see further work in the following areas:

1. Development of a DRE Scale based on an amended NDE Scale, which would include (i) categorization questions for NDE's, Coincidental-DE's and Empathetic-DR's; (ii) the empathetic relationship of the experiencer to the decedent; and (iii) more information on the content and back story of distressing NDE's.
2. A comprehensive review of DRE cases for recategorization and comparison under this new method, including biological or empathetic relationships among the experiencers.

3. Using a DRE Scale to compare DRE narratives in different cultures and religions, including Buddhism and indigenous religions, including expressions of the Call.
4. Longitudinal studies exploring (i) whether distressing DRE's resolve themselves during or after the experience; (ii) inherited and/or epigenetic characteristics of DRE's; (ii) empathy evaluations to determine whether empathy exhibits inherited and/or epigenetic traits and whether increases in empathy are associated with future DRE events; and (iii) whether psi abilities are related to or modified as a result of DRE's.

These suggestions are not for the faint of heart, requiring a reevaluation of the thousands of cases that are sitting in archives. But after all, “when was not the science of the future stirred to its conquering activities by the rebellious little exceptions to the science of the present?”²⁰⁰

²⁰⁰ William James, *Memories and Studies*, New York: Longmans, Green & Co., 1911, 206.

EPILOGUE

E.1 Introduction

This thesis has indicated that a physicalist/materialist approach of the brain as a closed system cannot sufficiently address the range of super normal phenomena associated with DRE's. I am now going to move into some speculative thought that derives from both scientific (physics and neurology) studies as well as the philosophy of consciousness.

Over the last twenty years or so, researchers have proposed the existence of a nonlocal consciousness; a universal consciousness, accessible to us during certain events, that could explain the existence of these DRE's and that would not conflict with neurophysiological research findings. The neurological changes observed during NDE's may either help with access to a nonlocal consciousness, or conversely, they may be the result of the brain accessing such consciousness. As earlier noted, this is not the same as the brain *causing* such events. Nonlocal consciousness would help explain why so many cultures share certain elements of DRE's, even as these features are cloaked in culture-specific garb. Most importantly, the concept of a nonlocal consciousness provides an explanation for Coincidental-DE and Empathetic-DE narratives that other theories have yet failed to produce.

This chapter will examine the discourse surrounding nonlocal, universal consciousness as it relates to the existence of DRE's. First, I will review Fredrick Myer's "Filter Theory," which has been adopted by a number of modern researchers, and which proposes that our brains have evolved to filter out data that might distract us or otherwise

jeopardize survival. The question of what a “breakthrough” of the filter is then considered. A brief discussion of the differing roles of the brain’s divided hemispheres and increasing specialization over time might lend some credence to the idea that consciousness of super normal events probably initiates in the right hemisphere and is cognized through the actions of both the right and left hemispheres. The breakthrough itself might be related to a Call, generally sent or received in a non-waking state of consciousness, is a possibility. The Call would be sent out for assistance in a NDE; it would be received in a Coincidental-DE or an Empathetic-DE. Finally, a short section on physics and social science proposals as to the relativity of quantum mechanics to DRE’s leads to the conclusion of this Epilogue.

E.2 Frederic Myers and the Filter Theory of Consciousness

In 1907, Frederic Myers published *Human Personality and its Survival after Bodily Death* with the intention of determining both a method for the study of consciousness and an argument for the survival of individual consciousness after death. Myers repudiated the notion of fixed points of knowledge, particularly in science, remarking that a “determined protest against premature synthesis is as much needed now as ever.”²⁰¹ He understood the difficulty in bringing a scientific methodology to bear upon the study of super normal phenomena, but believed that the response should be a widening of acceptable arenas of study and an acceptance of both empirical and subjective (such as narrative) evidence. Essentially, Myers was

²⁰¹ Kelly, “F.W.H. Myers,” 65.

arguing for reflexivity, or an awareness of the biases we bring to cognitive thought, in research.

Myers distinguishes several layers of consciousness: the limen (the threshold of ordinary cognitive consciousness); the subliminal (“of thoughts, feelings, etc., lying beneath the [limen]); and the supraliminal or ultramarginal (the consciousness above the liminal or our normal waking consciousness).²⁰² The three levels “cooperate,” and there may also occur “upheavals and alternations of personality of so many kinds, so that what was once below the surface may for a time, or permanently, rise above it.”²⁰³ Myers assumes that each level bears its own distinguishing facilities and that, through evolution, the liminal level has moved in “a continual displacement of the threshold of consciousness.”²⁰⁴

The three consciousnesses coexist on a scale in which the range of the subliminal is broader than that of the supraliminal. At one end of the subliminal are dreams (sleep therefore being an alternating phase of our personality²⁰⁵), and “at the other end of the scale we find that the rarest, most precious knowledge comes to us from outside the ordinary field,—through the eminently subliminal processes of telepathy, telaesthesia, ecstasy.”²⁰⁶ The power of the subliminal—the deep unconscious—was critical to Myers’ theory of access to different states of consciousness. Even the attributes of “Genius”

²⁰² Myers, *Human Personality*, xvii

²⁰³ Myers, *Human Personality*, 15.

²⁰⁴ Myers, *Human Personality*, 17.

²⁰⁵ Kelly, “F.W.H. Myers,” 102.

²⁰⁶ Myers, *Human Personality*, 57. Telepathy is defined as “the communication of impressions of any kind from one mind to another, independently of the recognised channels of sense.” Telaesthesia is “any direct sensation or perception of objects or conditions independently of the recognised channels of sense, and also under such circumstances that no known mind external to the percipient’s can be suggested as the source of the knowledge thus gained.” Myers, *Human Personality*, xvii-xviii.

should rather be regarded as a power of utilizing a wider range than other men can utilize of faculties in some degree innate in all;--a power of appropriating the results of subliminal mentation to subserve the supraliminal stream of thought;--so that an 'inspiration of Genius' will be in truth a *subliminal uprush*, an emergence into the current of ideas which the man is consciously manipulating of other ideas which he has not consciously originated, but which have shaped themselves beyond his will, in profounder his being.²⁰⁷

Genius is thus a fulfilment of human potential; "of something *supernormal*;--of something which transcends existing normality as an advanced stage of evolutionary progress transcends an earlier stage."²⁰⁸ In Myers' view, paranormal events result from subliminal uprushes integrated with superluminal cognitive processes.

Sometimes we seem to see our subliminal perceptions and faculties acting truly in unity, truly as a Self;--co-ordinated into some harmonious "inspiration of genius, "or some profound and reasonable hypnotic self-reformation, or some far-reaching supernormal achievement of clairvoyant vision or of self-projection into a spiritual world. Whatever of subliminal personality is thus acting corresponds with the highest-level centres of supraliminal life. At such moments the *subliminal* represents (as I believe) most nearly what will become the *surviving Self*.²⁰⁹

Consequently, at least certain psi occurrences are within humanity's range of consciousness and should be regarded as "supernormal" events.

Myers uses a metaphor of the spectrum of color to distinguish the scale of the levels. William James, fervently agreeing with Myers' hypothesis of a scale of consciousness, later summarized the metaphor and acknowledged Myers' contribution to psi scientific research.

The ordinary consciousness Mr. Myers likens to the visible part of the solar spectrum; the total consciousness is like that spectrum prolonged by the inclusion of the ultra-red and ultra-violet rays. In the psychic spectrum the "ultra" parts may embrace a far wider range, both of physiological and of psychical activity, than is open to our ordinary consciousness and memory. At the lower end we have the

²⁰⁷ Myers, *Human Personality*, 56.

²⁰⁸ Myers, *Human Personality*, 56. This uprush and integration is expressed in "wider symbolism, of self-communion beyond the limits of speech," and which is seen in "Art." Myers, *Human Personality*, 79.

²⁰⁹ Myers, *Human Personality*, 58.

physiological extension, mind-cures, "stigmatization" of ecstasies, etc.; in the upper, the hyper-normal cognitions of the medium-trance. Whatever the judgment of the future may be on Mr. Myers's speculations, the credit will always remain to them of being the first attempt in any language to consider the phenomena of hallucination, hypnotism, automatism, double personality, and mediumship as connected parts of one whole subject. . . . But, thanks to him, we begin to see for the first time what a vast interlocked and graded system these phenomena, from the rudest motor-automatisms to the most startling sensory apparition, form. Quite apart from Mr. Myers's conclusions, his methodical treatment of them by classes and series is the first great step toward overcoming the distaste of orthodox science to look at them at all.²¹⁰

James similarly believed that super normal events resulted from human consciousness in contact with some other acting consciousnesses; the "truth that the invisible segments of our minds are susceptible, under rarely realized conditions, of acting and being acted upon by the invisible segments of other conscious lives."²¹¹ Through this realization that human personality is far broader and extensive than we realize, Myers was able to present what is so far the most thoroughly worked out and empirically grounded version of [the] filter interpretation of mind-body correlation."²¹²

Myers did not invent the "filter" theory. Rather, his comprehensive theory of layers of consciousness provided a framework in which filter theory could be applied. Myers saw consciousness as an adaptive mechanism of permitting the shaping and filtering of waking consciousness within the larger, mostly latent, Self.²¹³ Thus he argued that the *subliminal self* was created evolutionarily to meet the demands of the present environment. The "filter" theory therefore suggests that consciousness is not produced by the brain, but the brain does have a functional component. Related

²¹⁰ James, "What Psychical Research has Accomplished."

²¹¹ James, "What Psychical Research has Accomplished."

²¹² Kelly, "F.W.H. Myers," 73.

²¹³ Kelly, "F.W.H. Myers," 73.

approaches might see the brain as “permissive, like the trigger of a crossbow, or more importantly, transmissive, like an optical lens or a prism . . . or perhaps, in more contemporary terms, like the receivers in our radios and televisions.”²¹⁴ Van Lommel continues the radio simile, noting that

you can activate the radio by turning it on, and you can activate a certain wavelength by tuning in on a special channel, but you will not have any influence of the content of the program you are going to hear. Activating the radio does not influence the content of the program, and neural activation alone does not explain the content of emotions or sensations.²¹⁵

Hence, while an adaptive, evolutionary-driven filter theory might explain why not all signals break through into our consciousness, it suggests—but does not explain why—some wavelengths do so advance and are consequently integrated into a waking-form of consciousness.

E.3 Breaking Through The Filter

How might “something” break through a filtered consciousness in order to be received by some different plane of awareness? I suggest that one possibility involves the right hemisphere of the brain acting as the receiver . Psychiatrist Iain McGilchrist studies the increasing specialization of the brain hemispheres over time as related to cultural changes in Western history.²¹⁶ McGilchrist contends that the brain develops through

²¹⁴ Edward F. Kelly, “A View From the Mainstream,” in *Irreducible Mind: Toward a Psychology for the 21st Century*, eds. Kelly et al. (Lanham, Md: Rowman & Littlefield, 2007), 1-46, 29.

²¹⁵ van Lommel, “Near-Death Experiences: The Experience of the Self,” 7.

²¹⁶ McGilchrist argues that the Reformation led to a rejection of the right hemisphere’s way of thinking, which is through symbolism and metaphor; “the decline of metaphoric understanding of ceremony and ritual into the inauthentic repetition of empty procedures in the Middle Ages prompted, not a *revitalisation* of metaphoric understanding, but an outright rejection of it, with the advent of the Reformation.” *The Master and His Emissary*, 314. During the Enlightenment, this dismissal became more solidified, with the left hemisphere becoming more dominant due to its focus on rationality (a context-dependent, dualistic, either/or approach) rather than reason (which is about “holding sometimes incompatible elements in balance; a right hemisphere approach). 331. McGilchrist then notes a swing back to the right hemisphere with the onset of Romanticism. “The breakthrough in Romantic thinking to the essential connectedness of things enabled them to see that those who are in awe of any great object-- whether it be God, or the

accretion, not replacement; an evolutionary process that represents biological responses to altered situations of dangers as well as the needs to communicate and to integrate with society.²¹⁷ Where Myers would have different levels of the Self paying attention to different stimuli, McGilchrist would suggest that different hemispheres of the brain focus onto these varying stimuli. The brain is thus a process, not a ‘thing.’ The brain appears to be evolving towards less connectedness between the two hemispheres, leading to a smaller corpus callosum (which is responsible for transmission between the hemispheres) and increased asymmetry.²¹⁸ It is the contrary influence of the two hemispheres that allows for finely calibrated responses to complex situations.²¹⁹

McGilchrist summarizes these differences in a way that points out the difference between my proposed method of categorization, which is founded on the importance of

vastness, beauty and complexity of nature--do not set themselves apart from it; they feel something that is Other, certainly, but also something of which they partake. Because of the empathetic connection or between us of which depth here is a metaphor they both share in the character of the Other and feel their separateness from it.” 363.

²¹⁷ “The cortex (the outer shell that mediates most so-called higher functions of the brain, and certainly those of which we are conscious, arose out of the underlying subcortical structures which are concerned with biological regulation at an unconscious level, and the frontal lobes, the most recently evolved part of the neocortex, which occupy a much bigger part of the brain in humans than in our animal relatives, and which grow forwards from and ‘on top of’ the rest of the cortex, mediate most of the sophisticated activities that mark us out as human—planning, decision making, perspective taking, self-control, and so on. In other words, the structure of the brain reflects its history: as an evolving dynamic system, in which one part evolves out of, and in response to, another.” McGilchrist, *The Master and His Emissary*, 8.

²¹⁸ Each hemisphere has its own ‘take’ on the world, leading to different realities that we experience. Thus, repeated preference for one side further entrenches an advantage that may have started out as marginal. McGilchrist, *The Master and His Emissary*, 10.

²¹⁹ The hemispheres present distinctly unique methods of operating in the world. Essentially, the differences between the hemispheric functions present thusly: The right hemisphere (“RH”) is more capable of mental flexibility and holding contrasting thoughts and thus inhibiting immediate responses. It is dominant for exploratory attention, while the left hemisphere (“LH”) focuses on what is within its grasp (literally). Visually, the RH is focused on whole picture; the LH attends only to what is on the right half of image. The RH has holistic or Gestalt perception while the LH only sees in parts. The RH presents individual, unique and familiar objects (it is responsible for identifying people), while the LH classifies into categories. Therefore, the RH will see things in their contexts while the LH abstracts items. The RH is the mediator of empathetic identification (the capacity to put oneself in another’s position and see what is going on in that person’s mind), as well as emotional receptivity and expressivity; the exception to this is anger and aggression which is connected with left frontal activation. McGilchrist, *The Master and His Emissary*, 32-69.

DRE narrative and comparison—located in the right hemisphere—and the predominant medical or scientific form of investigation that draws from the left hemisphere.

I believe the essential difference between the right hemisphere and the left hemisphere is that the right hemisphere pays attention to the Other, whatever it is that exist apart from ourselves, with which it sees itself in profound relation. It is deeply attracted to, and given life by, the relationship, betweenness, that exist with this Other. By contrast, the left hemisphere pays attention to the virtual world that it has created, which is self-consistent, but self-contained, ultimately disconnected from the Other, making it powerful, but ultimately only able to operate on, and to know, itself.²²⁰

McGilchrist's argument would thus suggest that the filter breakthroughs during DRE's may be located in the right hemisphere. DRE narratives repeatedly tell of a sense of the Other—feelings of unity, the presence of spiritual beings, the overwhelming sense of ineffability. The right hemisphere specializes in non-verbal communication and metaphor; "the importance of metaphor is that it *underlies all forms of understanding whatsoever*, science and philosophy no less than poetry and art."²²¹ I suggest that is from the right hemisphere that DRE's draw their common trait of the ineffable, with the experiencers commonly resorting to metaphor and symbolism to explain their feelings and sense of understanding of the event. In regard to their narratives, one of the most important conclusions that McGilchrist reaches is that the right hemisphere is more flexible than the left in that "at the 'meta level,' . . . it can also use the left hemisphere's preferred style, but the left hemisphere cannot use the right hemisphere's."²²² If so, then the right hemisphere may be utilizing the left hemisphere's processes as well as its own

²²⁰ McGilchrist, *The Master and His Emissary*, 93. McGilchrist argues that our current worship of science and technology may be traced back to the Industrial Revolution, which resulted not just in "man's most brazen bid for power over the natural world, the grasping left hemisphere's long-term agenda. It was also the creating of a world in the LH's own likeness." 386. In this way, the innate structures of the left hemisphere became incarnated through technology in the world. 387.

²²¹ McGilchrist, *The Master and His Emissary*, 71.

²²² McGilchrist, *The Master and His Emissary*, 41.

to cognate the experience, rendering it intelligible to the self and others through recognizable individual and cultural symbolisms. But this cannot work the other way around; the left hemisphere can never logically explain DRE's because it is limited by a narrower consciousness that can only evaluate data in logical discrete segments. Importantly, the right hemisphere is where empathetic identification is located; "self-awareness, empathy, identification with others, and more generally inter-subjective processes, are largely dependent upon . . . right hemisphere resources."²²³ As I argued earlier, an empathetic attachment with the decedent (or someone close to the decedent) appears to be a universal requirement for a DRE. This correlation similarly suggests that the right hemisphere is where the "receiver" is located.²²⁴

Consequently, I believe that a DRE transmission is most likely to be picked up by the right hemisphere and that both hemispheres would then coordinate in order for the experience to be transformed into, and expressed by, narrative. The activation of both hemispheres would thus be required for a DRE to occur; perhaps this is one reason that the more details or characteristics are contained within a narrative, the more powerful and transformative the experience appears to be.

²²³ McGilchrist, *The Master and His Emissary*, 57.

²²⁴ The right hemisphere is also critical in what is known as "theory of mind," which is closely related to empathy in that it is the ability to understand our beliefs, emotions and knowledge and consequently infer and predict the mental states of others. This quality, which develops in young children, is essential to empathy and is generally absent in autistic children. McGilchrist, *The Master and His Emissary*, 57. I suggest that one interesting corollary of this finding would be to study whether DRE's occur to autistic people.

E.4 Sending Out a Call

I argue that the Call is intentional, whether it is from a dying person or a predeceased being. As an intentional act, it requires some form of consciousness because “consciousness is the irreplaceable source of intentionality and meaning.”²²⁵ If a dying person sends out a call—as reported with the presence of spirits at the deathbed—consciousness and intent are involved. If a Call originates from a predeceased being—such as what I believe occurred with my Empathetic-DE—then we must accept the possibility of nonlocal consciousness that is not purely dependent upon brain processes and cognition.

Psi experiments have supported both the ideas of nonlocal consciousness and the importance of intentionality. Study protocols include random number experiments, where an individual intends to affect the performance of a physical system; remote viewing procedures where participants must garner information that is only possible through nonlocal perception; Ganzfeld studies in which the individual provides information on film clips being shown elsewhere; and presentiment, which is a measurable psychophysical response that occurs before actual sensory stimulation.²²⁶ All of these protocols require intentionality.²²⁷ Studies reviewing the research agree that “the

²²⁵ Alexander Wendt, *Quantum Mind and Social Science: Unifying Physical and Social Ontology*, (Cambridge: Cambridge University Press, 2015), 20.

²²⁶ Stephen A. Schwartz, “Six Protocols, Neuroscience, and Near Death: An Emerging Paradigm Incorporating Nonlocal Consciousness,” in *Aspects of Consciousness: Essays on Physics, Death and the Mind, Vol 2*, ed. Ingrid Fredricksson (Jefferson, NC: MacFarland, 2012, in press), 6.
https://www.academia.edu/9540536/Six_Protocols_Neuroscience_and_Near_Death_An_Emerging_Paradigm_Incorporating_Nonlocal_Consciousness

²²⁷ “Intentionality refers to the fact that mental states like beliefs, desires, and meanings are intrinsically ‘about’ or directed toward things beyond themselves, whether real objects in the world, fictional objects in one’s own mind, or the minds of other people.” Wendt, *Quantum Mind and Social Science*, 19.

effect sizes reported . . . are too large and consistent to be dismissed as statistical flukes.”²²⁸ Yet, it is difficult to find scientists who will consider psi research as valid.

E.5 Back to the Hard Problem of Consciousness

I do not intend to trace the rise of the scientific method and its relationship with Cartesian dualistic thought. For the purposes of this paper, I assume that current medical knowledge operates on the Newtonian perspective, which postulates that physical properties, determined by mathematical properties ascribable to space/time coordinates, defines aspects of reality.²²⁹ Classical mechanics is quite simplistic in that it assumes that every result is mechanically derived from a proximate cause. The universe resembles an enormous, self-winding, infallible clock. Similarly, the mind/consciousness are seen to be subject to the mechanical operation of their physical properties, all facets of which could be studied and understood through rigorous application of Newtonian-based research protocols.²³⁰ Mechanistic determinism is the principle that has made science so successful and each new success bolstered that view, culminating in the astronomer Laplace’s insistence that all circumstances “‘obey the great laws of nature’ and that what we perceive as happening by chance or by free will simply reflects our ignorance of the causes.”²³¹ Consequently, “the prevalent modern scientific approach to consciousness

²²⁸ Schwartz, “Six Protocols and Near Death,” 6.

²²⁹ David E. Presti, “Scientific Revolution and the Mind-Matter Reduction,” in *Mind Beyond Brain: Buddhism, Science, and the Paranormal*, ed. David E. Presti, (New York: Columbia University Press, 2018), 1-21, 4.

²³⁰ Following Presti, I define “mind” as “the collection of possible mental states—thoughts, feelings, and perceptions. These are irreducibly subjective states of experience, part of *what is it like to be you*,” and “consciousness” as “awareness or sentience . . . [which includes] awareness of these subjective mental states [and] nonconscious mental states—the unconscious aspects of the mind.” Presti, “Scientific Revolution,” 1.

²³¹ Kelly, Emily W, “F.W.H. Myers,” 48.

casts the brain as a biological computer, with 100 billion neurons and their axonal firings and synaptic connections acting as information networks of ‘bit’ states and switches.”²³²

Yet the hard problem of consciousness—how the physical processes taking place in the brain and body are related to the subjective experiences of the mind and consciousness—remains. The brain as a computer can account for complex nonconscious cognitive functions such as perception; this is the “easy” problem of consciousness.²³³ The hard problem of consciousness is how these neuronal firings, synaptic transmissions, neurotransmitter chemistry, and (apparently) neuronal computations can result in a conscious experience when consciousness remains irreducibly subjective and experiential.²³⁴ “How can the redness, texture, and fragrance of a rose, the experiential world, derive from data streams and electrochemical activity?”²³⁵

E.6 Quantum Consciousness

One possible answer to the question of consciousness emerges from modern quantum physics. In its study of the behavior of particles, quantum theory has challenged Newtonian mechanics because it has paradigmatically altered the reliability of predictably calculating results of experiments. Because atoms and subatomic particles behave as both waves and particles, they can exist in two or more states or places at the same time, and their measurement is thus limited to probabilities.²³⁶ These multiple

²³² Stuart Hameroff and Deepak Chopra, “The ‘Quantum Soul:’ A Scientific Hypothesis,” in *Exploring Frontiers of the Mind-Brain Relationship*, eds. Alexander Moreira de Almeida and Franklin Santana Santos (New York: Springer, 2012) 79-93, 80.

²³³ Hameroff and Chopra, “The ‘Quantum Soul,’” 80.

²³⁴ Hameroff and Chopra, “The ‘Quantum Soul,’” 80.

²³⁵ Hameroff and Chopra, “The ‘Quantum Soul,’” 80-81.

²³⁶ “In particular, whereas mathematical symbols in classical physics correspond to the properties of real material objects and forces, in quantum physics they represent only the probabilities of finding certain properties when they are measured.” Wendt, “*Quantum Mind and Social Science*,” 2-3.

coexisting possibilities are known as “quantum superposition” and are subject to quantum wave functions.²³⁷

This aspect of coexisting probabilities has also produced the “measurement problem,” as identified by Niels Bohr. Even though a particle wave function is merely a probability, it is also a complete description of a quantum system until its *conscious* measurement, at which point the wave function ‘collapses’ and it is reduced to just one random definite state—a Newtonian classical state.²³⁸ “In this approach [the Bohr/Copenhagen interpretation], consciousness *causes* quantum state reduction, placing consciousness outside science.”²³⁹ Observation, i.e., consciousness produces reduction to one state.

Objective reduction (“OR”) theories attempt to understand moments of consciousness as related to episodes of quantum state reduction caused by specific objective thresholds.²⁴⁰ Physicist Sir Roger Penrose extended Einstein’s general theory of relativity, in which matter is essentially space-time curvature, to the Planck scale,²⁴¹ concluding that a particle in one state or location would have a specific curvature in one direction and the same particle in a different state or location would have the exact opposite, all extending down to the Planck scale (10^{-33}cm).²⁴²

²³⁷ Hameroff and Chopra, “The ‘Quantum Soul,’” 82.

²³⁸ Bohr’s experiments indicated that quantum superpositions maintained all possibilities until a conscious human being actually observed the results that were being machine-measured. Hameroff and Chopra, “The ‘Quantum Soul,’” 82.

²³⁹ Hameroff and Chopra, “The ‘Quantum Soul,’” 82.

²⁴⁰ Hameroff and Chopra, “The ‘Quantum Soul,’” 82.

²⁴¹ “Planck units are a set of units of measurement defined exclusively in terms of four universal physical constants” which are the speed of light in a vacuum (c); the gravitational constant (G); the reduced Planck constant (\hbar); and the Boltzmann constant (k_B). Wikipedia, https://en.wikipedia.org/wiki/Planck_units#:~:text=the%20unit%20mass,-,Planck%20scale,effects%20of%20gravity%20become%20strong.

²⁴² Hameroff and Chopra, “The ‘Quantum Soul,’” 83.

Such space-time separations are unstable and will reduce, or collapse to one particular state or location at a particular time due to an objective threshold intrinsic to the fine structure of the universe, like infinitesimally tiny soap bubbles bursting on facet or another, shaping and creating a new reality. Penrose also suggests that each OR, or self-collapse—essentially a ripple or quantized annealing in fundamental space-time geometry—results in a moment of conscious experience.²⁴³

This viewpoint is very different from the Copenhagen interpretation in which consciousness causes reduction. In the Penrose OR, “consciousness IS reduction (a particular type of reduction). Thus [the Penrose OR] is the only world view incorporating consciousness into the universe.”²⁴⁴

An expanded hypothesis, the Penrose-Hameroff theory of Orchestrated Objective Reduction (“Orch OR”), proposes that “consciousness depends on quantum computations in structures called microtubules *inside* brain neurons, occurring concomitantly with and supporting neuronal-level synaptic computation.”²⁴⁵ Microtubules are protein components of the cell cytoskeleton that configures internal architecture, create and regulate synapses and communicate between different aspects of the cell. They also seem to act as the cell’s nervous system; “in microtubule lattices, states of individual tubulins are proposed to act as ‘bit’ states, as in classical computers and molecular automata . . . [raising] the capacity for neuronal information processing immensely.”²⁴⁶ The proposed

²⁴³ Hameroff and Chopra, “The ‘Quantum Soul,’” 83.

²⁴⁴ Penrose also suggests that the way in which superpositioned possibilities are reduced to particular classical states are not random, but are “influenced by information embedded in fundamental space-time geometry, information Penrose characterized as Platonic values.” These values are encoded in Planck scale geometry. Such a hypothesis actually removes the necessity for multiple universes, theories of which are governed by rules of physical constraints dictating values that limit the number of universes capable of supporting consciousness. With Penrose’s suggestion, the physical constraint values are encoded in the “fine structure of the universe itself, along with mathematical truth, Platonic values, and precursors of mass, spin, charge, and consciousness. The roots of consciousness may thus extend to the most basic level of the universe. Hameroff and Chopra, “The ‘Quantum Soul,’” 83-84.

²⁴⁵ Hameroff and Chopra, “The ‘Quantum Soul,’” 85.

²⁴⁶ Hameroff and Chopra, “The ‘Quantum Soul,’” 85.

theory suggests that “tubulins can be quantum bits, or ‘qubits’ in microtubule quantum computers, and that such quantum computations connect conscious brain functions to the most basic level of the universe. . . This opens the door to consciousness being nonlocal, and in some cases possibly untethered to body and brain.”²⁴⁷ Penrose and Hameroff suggest that brain microtubules have evolved to perform quantum computations that produce moments of consciousness and extend quantum entanglement through gap junctions that mediate gamma wave synchrony.²⁴⁸ While this hypothesis might seem a stretch, we know that neurons are complex cells. Other unicellular organisms also exhibit complex behaviors. For example, *Paramecium* can swim, find food, reproduce, avoid obstacles and learn, despite not having a single synaptic connection, through the organizational functions of microtubules.²⁴⁹

Consciousness, or our understanding of our experience, is thus inseparable from quantum physical reality. This viewpoint is increasingly being accepted by a broad coalition of scientists.

In disciplines as diverse as physics, biology, and neuroscience, research findings published in the peer-reviewed scientific and medical literature collectively indicate the existence of a nonlocal aspect of consciousness that is not wholly dependent on the brain, is not limited to specific points in space and time, and does not cease to exist with physical death.²⁵⁰

²⁴⁷ Hameroff and Chopra, “The ‘Quantum Soul,’” 85. They specifically states that Penrose does “not necessarily endorse the further speculations developed here, and generally avoids connections between science, religion, and spirituality.

²⁴⁸ “Quantum computations which are orchestrated by synaptic inputs in neurophysiology, isolated from decoherence [in which the quantum nature leaks into the surrounding system, resulting in more Newtonian classical, observable phases], and terminated by Penrose OR. hence orchestrated objective reduction, or ‘Orch OR.’ Microtubule quantum superpositions E are proposed to extend and entangle from neuron to neuron through gap junctions (which mediate gamma synchrony), enabling selective brain-wide quantum coherence among microtubules. . . . OR events also entail backward time effects, consistent with evidence for backward referral of conscious experience in the brain. . . . Entanglement with the future may enable real-time conscious action, and rescue consciousness from the unfortunate role of epiphenomenal illusion.” Hameroff and Chopra, “The ‘Quantum Soul,’” 86.

²⁴⁹ Hameroff and Chopra, “The ‘Quantum Soul,’” 81.

²⁵⁰ Website of Pim van Lommel. <https://pimvanlommel.nl/pim-van-lommel/nonlocal-consciousness/>

Consciousness, or what is commonly referred to as “our mind,” is a fundamental aspect of reality, not limited by the expanse of the brain. The physical brain is, rather, the slave of the master.

E.6.1 Can Quantum Theory be Applied to People?

Under quantum theory, a wave function is not “real,” it is merely a potential reality. But if we are all composed, essentially, of particles, are we merely walking probabilities? Are we unable to determine true causal relationships? Can quantum theory even be applied to events deemed religious? Political scientist and quantum social scientist Alexander Wendt argues that we must do so, invoking the concept of the “CCP,” or the “causal closure [or completeness] of physics,” which states that “the social [and all other] sciences are subject to a physics constraint: no entities, relationships, or processes posited in their inquiries should be inconsistent with the law of physics.”²⁵¹ He notes that the CCP does not require a commitment to physicalism because it is clear that it is at the sub-atomic level of matter that Newtonian mechanics breaks down and is unable to predict results.

Wendt suggests that it is an error to believe, as most hard scientists do, that quantum mechanics is irrelevant to any reality beyond the sub-atomic level. It is just not correct that “quantum effects wash out statistically [above the sub-atomic level], leaving the decohered world described by classical physics as an adequate approximation of macroscopic reality.”²⁵² Recent evidence supports his view, suggesting that “Planck scale information may repeat at increasing scales in space-time geometry, reaching to the

²⁵¹ Wendt, *Quantum Mind and Social Science*, 7.

²⁵² Wendt, *Quantum Mind and Social Science*, 3.

scale of biological systems. . . . At some point (or actually at some complex edge, or surface) in this hierarchy of scale, the microscopic quantum world transitions to the classical world.”²⁵³ That is, the effects of quantum physics will transfer into our familiar, Newtonian world. So, yes, according to Wendt, we are walking wave functions and quantum theory is applicable to the humanities.

Wendt insists that adopting a quantum consciousness theory, in which consciousness *is* a phenomena of quantum theory, might help solve the hard problem of consciousness.²⁵⁴ If so, then a quantum consciousness theory could account for nonlocal consciousness and address the full umbrella of DRE phenomena. Such a theory would incorporate the philosophical approach of panpsychism, which postulates that there is a quality of “mind” in all things in the universe.

Panpsychism takes a known effect at the macroscopic level—that we are conscious—and scales it downward to the sub-atomic level, meaning that the matter is intrinsically minded. . . . panpsychism opposes not only materialism but also idealism and dualism. . . . As physicist Freeman Dyson put it, ‘mind is already inherent in every electron, and the processes of human consciousness differ only in degree but not kind from the processes of choice between quantum states which we call ‘chance’ when they are made by electrons.’ . . . As such, quantum consciousness theory suggests that two of the deepest mysteries confronting modern science—how to interpret quantum theory and how to explain consciousness—are two sides of the same coin.²⁵⁵

When thinking about the nature of DRE’s, I would add quantum brain theory, which argues that the brain maintains “quantum coherence—a wave function—at the macro, whole-organism level,”²⁵⁶ and nonlocal entanglement, “in which components of a

²⁵³ Hameroff and Chopra, “The ‘Quantum Soul,’” 84.

²⁵⁴ Wendt, *Quantum Mind and Social Science*, 5.

²⁵⁵ Wendt, *Quantum Mind and Social Science*, 31.

²⁵⁶ Wendt, *Quantum Mind and Social Science*, 30-31.

spatially separated system remain unified and connected.”²⁵⁷ The concept of quantum entanglement would help account for how a Call is sent and received. It also explains why most people who experience Coincidental-DE’s and Empathetic-DE’s are related to the decedent. The Call would be strongest among those who are “entangled” with each other; how the entanglement occurs—whether genetic or even related to reincarnation—is, however, way beyond me.

E.7 Conclusion

A nonlocal approach to DRE’s focuses on the hard problem of consciousness, stipulating that consciousness is not merely a physiological, cognitive activity. It is, rather, the reverse. It is phenomenologically and ontologically unique. However, “the analytic process cannot deal with uniqueness: there is an irresistible temptation for it to move from the uniqueness of something to its assumed nonexistence, since the reality of the unique would have to be captured by idioms that apply to nothing else.”²⁵⁸ The great majority of scientific research simply disregards Coincidental-DE’s and Empathetic-DE’s or assumes them to be nonexistent, false memories, or hallucinations.

One concept that might be able to account for all three forms of DRE’s is a combination of the Penrose-Hameroff Orch OR theory; McGilchrist’s idea of evolving, increasingly specialized brain hemispheres; Myers’ Filter Theory; and Crookall’s notion of a Call. Under this proposition, our brains function at a quantum consciousness level

²⁵⁷ Hameroff and Chopra, “The ‘Quantum Soul,’” 82. “Quantum entanglement is a physical phenomenon that occurs when a pair or group of particles is generated, interact, or share spatial proximity in a way such that the quantum state of each particle of the pair or group cannot be described independently of the state of the others, including when the particles are separated by a large distance. The topic of quantum entanglement is at the heart of the disparity between classical and quantum physics: entanglement is a primary feature of quantum mechanics lacking in classical mechanics.”
https://en.wikipedia.org/wiki/Quantum_entanglement#:~:text=Quantum%20entanglement%20is%20a%20physical,incl%20when%20the%20particles%20are

²⁵⁸ McGilchrist, *The Master and His Emissary*, 19.

even as hemispheric division and specialization occurs in response to the changing needs of evolving biological and cultural environments. Our brains filter irrelevant information not necessary for survival in those current environments from forms of conscious awareness, but such information remains stored in the brain—whether it is in a subliminal state, Jungian unconsciousness, or different space-time planes—until something triggers its emergence. The Call might be one such trigger, received by someone who is “entangled” with the sender; thus, the common factor of emotional relationships between decedents and Coincidental-DE’s and Empathetic-DE’s. In support, studies have indicated a sharp rise in brain wave activity in the period *following* cardiac death, which does not seem possible if consciousness is purely reliant on physical processes.²⁵⁹ The resultant increase in gamma synchrony would suggest that this might be the time the Call is emitted and received due to entanglement. However, this timing does not account for Empathetic-DE where the observer is ‘present’ before or immediately during death. This suggests that either the actor/decedent or the narrator/observer or something else is somehow aware that a death is about to occur. Orch OR can also account for such a Call preceding death as it allows for entanglement with the future along with real-time action.

Correctly categorizing DRE events is thus important for exploring the possibilities associated with quantum brain and nonlocal consciousness. Because the previously discussed approaches all bear deficiencies, particularly with regard to Coincidental-DE’s and Empathetic-DE’s, the door is open to consider a more expansive viewpoint of human

²⁵⁹ For example, Chawla et al. studied seven patients on life support and a BIS monitor; the latter records frontal EEG activity with 0 equaling EEG silence and 80-100 as the value for a fully awake adult with gamma synchrony. While on life support, the BIS was 40 or higher; when life support was withdrawn, the BIS gradually decreased to below 20 until cardiac arrest occurred; postcardiac death, the BIS abruptly rose to 60 (or in most cases) 80 or higher for between 90 seconds and 20 minutes after which it rapidly dropped to near zero. L.S. Chawla, et al., “Surges of Electroencephalogram Activity at the Time of Death: A Case Study,” *Journal of Palliative Medicine*, 12(12) (2009): 1095-1100.

consciousness. The proposed unifying concept, with its numerous facets, appears to be a pragmatic framework for evaluating DRE's without violating any or the work done, or the conclusions set forth, in existing medical or cultural/cognitive constructivist research. It would appear, therefore, to be worthy of further consideration.

APPENDIX 1

Questionnaire for the Greyson NDE Scale

1. Did time seem to speed up or slow down?

0 = No

1 = Time seemed to go faster or slower than usual

2 = Everything seemed to be happening at once; or time stopped or lost all meaning

2. Were your thoughts speeded up?

0 = No

1 = Faster than usual

2 = Incredibly fast

3. Did scenes from your past come back to you?

0 = No

1 = I remembered many past events

2 = My past flashed before me, out of my control

4. Did you suddenly seem to understand everything?

0 = No

1 = Everything about myself or others

2 = Everything about the universe

5. Did you have a feeling of peace or pleasantness?

0 = No

1 = Relief or calmness

2 = Incredible peace or pleasantness

6. Did you have a feeling of joy?

0 = No

1 = Happiness

2 = Incredible joy

7. Did you feel a sense of harmony or unity with the universe?

0 = No

1 = I felt no longer in conflict with nature

2 = I felt united or one with the world

8. Did you see, or feel surrounded by, a brilliant light?

0 = No

1 = An unusually bright light

2 = A light clearly of mystical or other-worldly origin

9. Were your senses more vivid than usual?

0 = No

1 = More vivid than usual

2 = Incredibly more vivid

10. Did you seem to be aware of things going on elsewhere, as if by extrasensory perception (ESP)?

- 0 = No
- 1 = Yes, but the facts have not been checked out
- 2 = Yes, and the facts have been checked out

11. Did scenes from the future come to you?

- 0 = No
- 1 = Scenes from my personal future
- 2 = Scenes from the world's future

12. Did you feel separated from your body?

- 0 = No
- 1 = I lost awareness of my body
- 2 = I clearly left my body and existed outside it

13. Did you seem to enter some other, unearthly world?

- 0 = No
- 1 = Some unfamiliar and strange place
- 2 = A clearly mystical or unearthly realm

14. Did you seem to encounter a mystical being or presence, or hear an unidentifiable voice?

- 0 = No
- 1 = I heard a voice I could not identify
- 2 = I encountered a definite being, or a voice clearly of mystical or unearthly origin

15. Did you see deceased or religious spirits?

- 0 = No
- 1 = I sensed their presence
- 2 = I actually saw them

16. Did you come to a border or point of no return?

- 0 = No
- 1 = I came to a definite conscious decision to "return" to life
- 2 = I came to a barrier that I was not permitted to cross; or was "sent back" against my will.

A score of 7 or higher is considered a NDE for research purposes. The mean score among a large sample of near-death experiences is 15.

The following appendage on scoring was not included in the above article - see references listed below.

SCORING:

Sum of all 16 items = total NDE Scale score

Among a criterion group of NDErs, the mean score on this scale was 15 with a standard deviation of 7.84; we therefore use a score of 7 or greater (1 standard deviation below the mean) as the cut-off point for identifying an experience as an NDE.

Sum of items 1-4 = cognitive component

Sum of items 5-8 = affective component

Sum of items 9-12 = paranormal component

Sum of items 13-16 = transcendental component

SCORING TYPE OF NDE:

Cognitive type = cognitive component score 5 or higher

Transcendental type = cognitive component score less than 5 and transcendental component score 5 or higher

Affective type = cognitive and transcendental component scores each less than five, and affective component score 5 or higher

Paranormal type = cognitive, transcendental, and affective component scores each less than 5, and paranormal component score 5 or greater

Unclassifiable = no component score 5 or greater

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