Journal of Scientific Exploration

Anomalistics and Frontier Science

HIGHLIGHTS

tailed study.

ABSTRACT



The Darker Side of Near-Death Experiences

Bruce Greyson

cbg4d@uvahealth.org

orcid.org/0000-0002-2192-7898

Division of Perceptual Studies Department of Psychiatry & Neurobehavioral Sciences, University of Virgina Health System

SUBMITTEDJanuary 1, 2023ACCEPTEDApril 21, 2023PUBLISHEDDecember 31, 2023

https://doi.org/10.31275/20232843

PLATINUM OPEN ACCESS



Creative Commons License 4.0. CC-BY-NC. Attribution required. No commercial use.

KEYWORDS

Near-death experience, frightening near-death experience, distressing near-death experience, hellish near-death experience, void near-death experience.

and their relationship to other dark spiritual experiences.

Although most near-death experiences involve profound bliss, research also shows that

some involve different types of negative or frightening perceptions which deserve de-

Modern research on near-death experiences (NDEs), powerful spiritual experiences triggered by a close brush with death, has focused on experiences characterized by profound positive feelings, ranging from incredible peace and calmness to bliss and ecstasy. However, throughout history there have been accounts of frightening deathbed visions and terrifying journeys to a hellish realm peopled by evil forces or beings. It is difficult to determine the prevalence of these distressing NDEs because the anxiety and judgmentalism they evoke deter experiencers from acknowledging and revealing them. Nevertheless, most recent studies estimate their prevalence at between 11% and 22% of all NDEs. Their phenomenology varies widely, but attempts to categorize distressing NDEs have yielded several distinct types. Various researchers

have attributed distressing NDEs to the personal characteristics of the experiencer, to

biological factors of the brush with death, or to other circumstances around the event.

Overall, distressing NDEs appear to be associated with fewer permanent aftereffects than the more common pleasant NDEs, which may reflect the reluctance of experiencers to focus attention on unpleasant experiences. Nevertheless, some distressing NDEs lead to long-lasting emotional trauma. Several strategies have been described by which

experiencers try to come to terms with and find meaning in, their distressing NDEs. Much research remains to be done on the causes and aftereffects of distressing NDEs

INTRODUCTION

Near-death experiences (NDEs) are powerful percepts with features often considered spiritual, typically occurring to individuals close to death or in intense danger. While life-threatening situations are reliable triggers for NDEs, comparable mystical experiences can occur in a wide variety of other circumstances. Most reported NDEs include profound feelings of peace or bliss, joy, a sense of cosmic unity ("being one with everything"), an out-of-body experience, passing through a darkness, encountering a light (often described as "a loving being of light"), meeting spiritual beings and/or deceased persons, a life review, and an altered sense of time. In contrast to most people's idea of the dying process, for the most part, NDErs are not terrified or panicking as they

ESSAY

face death. In fact, most people who report NDEs describe overwhelmingly positive feelings, ranging from incredible calmness to joy and ecstasy.

But, not all NDEs are described as blissful or pleasant. Although only a minority of experiencers describe frightening or distressing experiences, it is possible that there are more people who have unpleasant NDEs but are unwilling to talk about them or that clinicians and researchers are reluctant to hear about them. The topic is so laden with anxiety and judgmentalism that it is difficult to gather reliable information about unpleasant NDEs and their aftereffects (Bush, 2002, 2012). For those reasons, we cannot be confident that frightening near-death experiences are as rare as they appear to be (Clark, cited in Flynn, 1986).

Frightening deathbed visions were well-known in past centuries. Christian and Hindu iconography were replete with examples of postmortem horrors, including terrifying encounters with evil forces or beings (Grosso, 1981). The medieval Christian literature included an abundance of journeys to Hell or purgatory and back, and comparable stories of travel to an underworld realm of the dead can be found in nearly all cultures (Zaleski, 1987a, 1987b). Yet modern research on NDEs has tended to focus almost exclusively on blissful experiences. As Zaleski summarized this divergence from the historical accounts, "gone were the bad deaths, harsh judgmental scenes, purgatorial moments, and infernal terrors of medieval visions; by comparison, the modern other world is a congenial place, a democracy, a school for continuing education, and a garden of earthly delights" (1987a, p. 21).

In keeping with the focus of this issue of the Journal on "The Darker Side of Spirituality," encompassing beliefs, activities, perceptions, or experiences with ostensibly unpleasant, negative, troubling, or even sinister themes, this article will focus on NDEs that are dominated by scary, malevolent, or otherwise unpleasant content and emotions.

TERMINOLOGY

There has been little agreement among different researchers as to what to call unpleasant NDEs. They were initially labeled "negative NDEs" (e.g., Grey, 1985; Irwin & Bramwell, 1988; Lindley, Bryan, & Conley, 1981; Rogo, 1979). However, that label was rejected by some NDErs as judgmental or pejorative, and by some researchers because unpleasant experiences can promote positive introspection and spiritual growth, and because the term "negative experience" had also been used to refer to close brushes with death without an NDE. To avoid the condemnatory term "negative NDE," Ellwood (1996) referred to unpleasant NDEs as "photographic negatives," giving a true picture but with the values reversed, and a necessary stage in the development of the final picture.

Unpleasant NDEs have also been called "hellish experiences" (e.g., Rawlings, 1978, 1980), "frightening NDEs" (e.g., Jambor, 1997; Ring, 1994a, 1994b, 1996), and "painful NDEs" (Ellwood, 2001), but those terms are applicable to only one variety of unpleasant experience. They have also been called "distressing NDEs" (e.g., Bush, 2009; Bush & Greyson, 2014; Cassol, Martial, Annen, et al., 2019; Ellwood, 1996; Greyson & Bush, 1992) and "less-than-positive NDEs" (e.g., Rommer, 2000, 2002), but those labels struck some researchers as too mild to convey the intense emotions evoked by these experiences. Nevertheless, I will refer to these unpleasant experiences as "distressing NDEs," in keeping with the terminology used in The Handbook of Near-Death Experiences (Bush, 2009) and in subsequent publications, and to focus on the unpleasant emotions that characterize these NDEs rather than on the metaphorical content of these diverse experiences.

PREVALENCE OF DISTRESSING NEAR-DEATH EX-PERIENCES

Most research into NDEs in the 1970s and 1980s focused on pleasant experiences. Scales developed in the 1980s to identify and quantify NDEs, the Weighted Core Experience Index (Ring, 1980) and the NDE Scale (Greyson, 1983) placed high value on pleasant emotions but did not include unpleasant emotions (Cassol et al., 2019; Greyson & Bush, 1992). These scales' bias toward pleasant NDEs and lack of sensitivity in identifying distressing experiences may have contributed to their underrepresentation, and was one factor in the development of the modified NDE-C scale, which included one item addressing unpleasant emotions (Martial, Simon, Puttaert, et al., 2020). However, that item in the NDE-C has been criticized for its wording that mixed a condition ("non-existence"), a context ("void"), and an emotion ("fear"), rendering it "illogical and unanswerable" (Bush, 2021).

Wider attention to distressing NDEs began in the 1990s. Prevalence estimates of distressing NDEs have varied widely, perhaps influenced by the small sample size of most studies and by differing criteria for differentiating pleasant from distressing NDEs (Cassol et al., 2019).

The first estimate of the prevalence of distressing NDEs was published by Rawlings in 1978, in which he speculated that more than half of all NDEs started with "hell-like" experiences but that most experiencers repress memories of these painful incidents before researchers can interview them. Rawlings' conclusions (1978, 1980) were not widely accepted, however, partly because they were not supported by his own data (e.g., most of his NDE accounts were collected years after the event) and other

researchers found no evidence that distressing NDEs were rapidly repressed or were reported more often immediately upon resuscitation, and partly because his acknowledged intent in studying NDEs was to persuade readers to commit themselves to Christian doctrines as the only way to avoid Hell (Grey, 1985; Ring, 1980; Sabom, 1979). Indeed, Rawlings himself acknowledged that his research was biased by his role as a "born-again" Christian (Auchmutey, 1979).

In 1992, Atwater noted that most researchers at that time regarded distressing NDEs as quite rare, citing an estimate of 1 percent of all NDEs in the Gallup Poll (Gallup & Proctor, 1982). That 1 percent estimate was later endorsed by Ring (1984) and by Charland-Verville, Jourdan, Thonnard, et al. (2014).

On the other hand, Garfield (1979) identified 8 intensive care or coronary care patients who had distressing NDEs after a close brush with death, amounting to 22 percent of the 36 patients he interviewed who could recall any experience; Lindley, Bryan, and Conley (1981) identified 11 distressing experiences (20%) among a sample of 55 NDEs; Atwater (1992) reported that her collection of "more than 700" NDE accounts included 105 distressing experiences, a prevalence of up to 15 percent; Gibson (1996) reported 12 distressing experiences (18%) among a sample of 68 NDEs; Rommer (2000, 2002) found that 18 percent of NDErs in her database had distressing experiences; Cassol, et al. (2019) reported that of their sample of 123 NDErs, 17 (14%) reported distressing experiences; and in an unpublished analysis of 546 experiencers in the University of Virginia NDE database, 437 (80%) said their NDE was primarily "pleasant," 51 (9%) said it was "emotionally neutral," and 58 (11%) said it was primarily "unpleasant" (i.e., distressing).

In summary, Rawlings (1978), who acknowledged bias based on his religious beliefs, estimated the prevalence of distressing NDEs at more than half. At the other extreme, three reports estimated the prevalence at 1 percent: Gallup and Proctor (1982), Ring (1984), and Charland-Verville et al. (2014).

Despite these extreme estimates of 1 percent to more than half, the majority of researchers who investigated distressing NDEs have come up with an intermediate estimate of between 11 and 22 percent: Garfield (1979), 22 percent; Lindley, Bryan, and Conley (1981), 20 percent; Gibson (1996) and Rommer (2000, 2002), 18 percent; Atwater (1992), up to 15 percent; Cassol, et al. (2019), 14 percent, and the unpublished University of Virginia analysis, 11 percent.

DESCRIPTIONS OF DISTRESSING NEAR-DEATH EX-PERIENCES

The first modern published reference to distressing NDEs was by Delacour (1974), who described horrific visions of descents into a pit or cave with ghastly, eyeless figures and flames of fire, although later researchers regarded his work as fictionalized (Ellwood, 1996).

Rawlings (1978) described distressing NDEs (which he called "hellish") as including being surrounded by grotesque human and animal forms, hearing other people moaning and in pain, violence, and demonic types of torture, reminiscent of Dante's Inferno. He noted great variety in content among distressing NDEs, in contrast to the consistency among pleasant experiences.

Lindley, Bryan, and Conley (1981) described distressing NDEs (which they called "negative") as containing extreme fear, panic, or anger and added that some contain visions of demonic creatures that threaten or taunt the experiencer.

The nationwide Gallup poll (Gallup & Proctor, 1982) reported that the rare distressing NDEs they found included featureless, forbidding faces, a sense of discomfort or emotional unrest, confusion, and a sense of being tricked into annihilation.

Grey (1985) described distressing NDEs as characterized by extreme fear or panic, emotional or mental anguish, utmost desperation, an intense feeling of loneliness, and a great sense of desolation. She also identified a "hell-like" experience that included a sense of being dragged down by an evil force, being threatened by wrathful or demonic creatures, extreme cold or heat, hearing the wailing or tormented souls and the snarling of wild beasts, and sometimes proverbial fire and an encounter with the devil.

Atwater (1992) described distressing NDEs as including lifeless or threatening apparitions; barren or ugly expanses; threats, screams, or silence; violence or torture; feeling of cold; diminished light; fear or anxiety; and struggling to stay alive.

An unpublished 2023 qualitative study distressing NDEs at Lund University in Sweden (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University) that used interpretive phenomenological analysis to study eight distressing NDEs qualitatively reported 11 themes in the content of the experiences: fear (in 7 of 8 narratives), confusion (in 3 of 8), being in a dark realm (in 4 of 8) sometimes identified as Hell (in 3 of 8), being judged by God as unworthy (in 3 of 8) or of judging oneself as unworthy (in 2 of 8), feeling out of control (in 5 of 8) or conversely having some degree of control over the situation (in 2 of 8), pleading for divine help (in 2 of 8), and feeling alone and rejected (in 2 of 8).

Mixed Pleasant and Unpleasant Near-Death Expe-

riences

It should be noted that some NDEs include both pleasant (often heavenly) and unpleasant (often hellish) features (Cassol et al., 2019), which have recently been labeled "hybrid experiences" (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University unpublished study). Lindley, Bryan, and Conley (1981) reported that distressing NDEs are usually transformed at some point into peaceful experiences. They also noted that unpleasant emotions occur at the end of some NDEs, although their descriptions suggested that they included in that category NDEs that were entirely pleasant but were followed by anger or panic at the experiencers' return to the physical body and to mundane reality.

Sabom (1982) found that out of 34 hospitalized patients who described NDEs when interviewed after a near-death crisis, 14 (41%) reported the transcendental experience began with a sense of entering a dark region or void, sometimes accompanied by momentary fright or bewilderment, but that in time these unpleasant emotions were replaced with calm, peace, or tranquility. Irwin and Bramwell (1988) reported the NDE of a 50-year-old woman that began as a blissful experience but changed into a frightening one upon an encounter with the devil. Conversely, Bonenfant (2001) reported the NDE of a 6-year-old boy that began as a frightening encounter with the devil but later changed to a pleasant experience with God and a protective angel.

Types of Distressing Near-Death Experiences

Garfield (1979) described four types of altered state experiences at the approach of death: (1) a powerful light, celestial music, and an encounter with religious figures of deceased relatives; (2) demonic figures and nightmarish images of great lucidity; (3) dreamlike images, sometimes blissful, sometimes terrifying, and sometimes alternating, with variable content and less lucidity than the other types; and (4) drifting aimlessly on outer space or being encapsulated in a limited environment with obvious spatial constraints, sometimes called a void or tunnel. The last three types can be considered categories of distressing NDE, although Garfield did not label them as such.

Greyson and Bush (1992) suggested the first classification of types of distressing NDE based on a study of 50 such experiences. Their typology had some overlap with Garfield's altered states types 2, 3, and 4. They suggested that the most common type, which Ring later labeled "inverted NDEs" (Ring, 1994a), contained phenomenological features typical of pleasant NDEs, such as a bright light, a tunnel, a sense of leaving the body, and a life review, but were experienced as terrifying rather than comforting. Many experiencers identified the loss of ego control as the frightening aspect of the inverted NDE, and Greyson and Bush (1992) noted that some inverted NDEs eventually converted to pleasant experiences, a phenomenon noted previously by Lindley, Bryan, and Conley (1981) and by Sabom (1982).

An example of an inverted NDE was reported by a 27-year-old woman:

Suddenly I became aware that something really strange was happening. It was as if I had been pulled up and away from my body, and I found myself watching my doctor and his nurse working on my body from a corner or the room near the ceiling. I felt so startled at being able to hover above like that. And I wanted to feel in control of my situation but I was unable to do anything except watch helplessly. I made some attempts to get the attention of the other two in the room, but they were totally oblivious to anything I was saying to them.

Then I found myself no longer in the room but traveling through a tunnel, slowly at first then picking up speed as I went. As I entered the tunnel, I began hearing the sound of an engine, the kind that operates heavy machinery. Then, as I was moving slowly I could hear voices on each side of my head, the voices of people whom I've known before because they were vaguely familiar. About this time I became frightened, so I didn't concentrate on trying to recognize any of the voices.

I found myself growing more and more afraid as the speed picked up and I realized that I was headed toward the pinpoint of light at the end of the tunnel. The thought came to me that this was probably what it was like to die. I decided then and there that I wanted to go no further, and tried to backpedal, stop, and turn around, but to no avail. I could control nothing, and the pinpoint of light grew larger and larger. Before I knew it, that light exploded all around me. My attitude at this time was quite terrified; I did *not* want to be there, and I was determined that I was *not*, by God, going to stay. (Greyson & Bush, 1992, p. 101)

The second, less common type of distressing NDE, the "void NDE," was characterized by a paradoxical experience of nothingness or of existing in an isolated and eternal featureless void, corresponding to Garfield's altered state type 4. Sometimes void NDEs included a sense of despair that life as we know it never existed, but was all a cruel joke, and left the experiencer with a pervasive sense of emptiness and fatalistic despair after the event.

An example of a void NDE was reported by a 26-year-old woman:

I passed through different stages of "torment." Voices were laughing at me, telling me all of life was a "dream," that there was no Heaven, Hell, or Earth, really, and that all I had experienced in life was actually an hallucination....

I passed through the stage of terrible thirst and the voices kept laughing and telling me, "You think this is bad? Wait till the *next* stage!" I found myself hurtling towards the final torment: I was to be suspended in a total vacuum with nothing to see or do for eternity. I was naked and I was sad about that because I thought, "If only I had clothing I could pull the threads and knot them and reweave them for something to do!" And, "If only I were sitting in a chair I could splinter it and try to make something of the splinters." And then the overwhelming realization that eternity was forever and ever, time without end! What to do in a vacuum forever?

After all these years, the nightmare remains vivid in my mind. I assure you the worst form of Hell, in my mind at least, would be myself suspended, naked, in a vacuum!

Not all NDEs characterized by the void are distressing experiences, however. Just as the features typical of pleasant NDEs can occasionally be perceived as distressing experiences in inverted NDEs, so too some void NDEs, which are usually characterized by fear, terror, and despair, can occasionally be experienced as liberation from suffering. Such pleasant void NDEs are reminiscent of the Buddhist concept of the empty void as an experience of nirvana, in which there is no essence or fundamental nature in anything, and everything is empty, with no abiding self or soul in any being, and all subject-object discrimination and polarities disappear, there is no conventional reality, and the only ultimate reality of emptiness is all that remains.

An example of a blissful experience of a void NDE was reported by a 59-year-old man:

It was the deepest darkness I had ever known. I felt utterly secure in my darkness. I had "come home" to a state beyond all danger, where I no longer needed or wanted to see anything, because everything I could possibly need was already mine. That shining darkness seemed to contain everything that ever was or could be, and all space and all time. Yet it contained nothing at all, because "thing" implies separate entities, whereas what I experienced was a simple "beingness" without any kind of separation of one thing from another, the essence of "aliveness" prior to any individual living entities. A paradoxical expression from Eastern mysticism is the only one that is remotely adequate: "the living void." The idea of a void being interesting would have seemed nonsense to me before, but now it makes total sense. In fact, the state I am trying to describe seems to defy all ordinary canons of logic.

It was in no way merely negative. It was certainly "a very peaceful blackness," but there was nothing passive or lifeless about it. Words like "bliss" or "joy" are equally inadequate, for they are far too limited.

I have no recollection of the transition from ordinary into Nirvanic consciousness. In the shining darkness, there was no feeling of having gone anywhere; it was more like everywhere being present to me. Yet there was a sense of having ceased to be the ordinary me.

My feeling is of being beyond death – though I do not mean surviving death. The Self that I had become was so much greater than my ordinary self that I had little recollection of, or interest in, my personal history. Yet, I did not lose my past or the people I have known in ordinary life. Although my NDE did not contain a "life review" like many other NDEs, I still sensed that my whole life was completely present, and could have been reviewed if I had wanted. But in that "deep and dazzling darkness" I felt no need.

The whole experience was blissful. The bud that was me opened out in response to that black sun, which was also, paradoxically, my-Self. I was alpha and omega, the beginning and end of the creation process. The shining dark consciousness is all the happiness I could possibly want.

A similar experience of a blissful void was reported by a 37-year-old man:

Things became dim or dark. I was suspended, looking down at me alone in the jail cell. I was sad. The shame was unbearable. I wasn't supposed to be like this, what happened to me. I was alone in this cell and it served me right I would just spend eternity alone. It was sinking in that I was dead. I was in this cell alone with nowhere to go. It was absolutely the worst feeling in the world: I was alone, dead, and nobody knew. I remember what seemed like I was traveling out of my body and then coming back, like I could leave but had nowhere to go.

The tunnel really didn't feel like a tunnel. It's hard to describe. I didn't feel I had any control over what was happening. I heard what appeared to be loud clicking or banging with a swooshing sound. I was moving and lights were flashing. I then felt as if I was floating or suspended in a milky black area. It seemed like there were layers of this milky black that went forever, or as far as I could see.

While suspended in this milky area, I began to feel a feeling and I was immediately drawn to it. I don't remember seeing any light, but this feeling was not of this world: all my pain was gone. I was drawn to it. My whole self, being, whatever, wanted nothing but this feeling. I just can't put into words what this felt like: perhaps nirvana, purest form of love, whatever. I just wanted more. I sensed something special and monumental was going on. I just knew I would never be the same, and frankly didn't care. I felt I was moving toward this feeling through the milky stuff, being drawn to it.

I found myself at some sort of crossing or border. I knew that if I crossed I could not come back. I knew I was at some point of no return and felt like a decision needed to be made. That was the last thing I remember.

These unusual examples of void NDEs that are not distressing experiences illustrate the differences in how NDEs may be experienced by different individuals, just as do classical pleasant NDEs and inverted NDEs.

The third and least common type identified by Greyson and Bush (1992), the "hellish NDE," was described as visiting hell-like regions and encountering demonic beings, corresponding to Garfield's altered state type 2. Grey (1985) and Ring (1994a) regarded hellish NDEs as a more intense and culturally derived version of inverted NDEs.

An example of a hellish NDE was reported by a 26-yearold woman:

Instantly I started plummeting downward, falling into darkness, a horrible endless black space. Imagine standing in an elevator and all of a sudden the floor drops out and down you go, that terrible sensation of falling. I was terrified in the darkness that surrounded me but very aware of the horrible pain burning and searing my entire body, agonizing pain beyond description that would never leave. There were the tortured screams of others but I could see nothing but the darkness. There was no fire, just this dreadful burning pain over every part of me and I knew that this was Hell.

I felt hopeless – knowing this was for eternity! There was no escape from the nightmare: I wouldn't wake up; I wouldn't hit bottom and die; I wouldn't be rescued by anyone. I would fall and burn in this gruesome place forever and ever and ever, screaming out with all these other lost souls crying out in the darkness, totally helpless as we fell further into the pit of Hell. Not even God entered into this place and the torture would go on forever and ever and ever. There was no way to describe the terror that filled me, realizing that I actually sent my self to Hell through my choice of not believing. I had chosen this. I had chosen not to believe in God.

I felt a separation, as if I had never existed. There is no lonelier place that separation from God. I saw no flames, just total darkness and the sensation of burning. I heard many people screaming but I saw no one. It was a dark, desolate, horrible place with no hope of escape. I felt the hopelessness of being lost in torment, separated from God for eternity. (Greyson, 2021, p. 145)

Gibson (1996) suggested an additional category of distressing NDE that he called "instructional," in which experiencers are led by a "spirit guide" to a realm where they can witness deceased beings suffering extreme agony in a hellish type of existence, but the experiencers themselves are not subjected to the agony of the witnessed beings.

An example of an instructional NDE was reported by a 27-year-old woman:

I looked down upon the accident scene. I looked into my car and saw myself trapped and unconscious.... A hand touched mine, and I turned to see where this peace and serenity was coming from ... and there was Jesus Christ – I mean the way he is made out to be in all the paintings.

I was led around a well, because I wanted to stay with him and hold his hand. He led me from a side of bliss to a side of misery. I did not want to look, but he made me look – and I was disgusted and horrified and scared, it was so ugly. The people were blackened and sweaty and moaning in pain and chained to their spots. And I had to walk through the area back to the well. One was even chained to the evil side of the well. The man was so skeletal and in such pain – the one chained to the evil side of the well – I wanted to help him, but no one would, and I knew that I would be one of those creatures if I stayed. I hated it there. I couldn't wait to get to the well and go around it. He led me to it, but he made me go through it alone as he watched. Someone else followed me through and then stepped in front of me to help me walk over the debris on the ground – snakes or something. I never looked at this thing, but I know it was dark. (Greyson & Bush, 1992, pp . 105-106)

Ellwood (1996) suggested subdividing hellish experiences into (a) those that are entity-centered, including malevolent beings, which Ellwood thought were analogous to figures sometimes encountered in schizophrenia and nightmares, but no fire; and (b) those that are fire-centered, including hellfire but no powerful or malevolent beings, which Ellwood thought were analogous to the experiences of saints and mystics. She also speculated that, with further research, there may be a third subcategory of hellish NDE, characterized by neither malevolent beings nor hellfire but rather spinning vortex-like energies, as described previously by Atwater (1994).

An example of a distressing NDE characterized by a vortex was reported by a 21-year-old woman:

I recall being pulled down into a spinning vortex. At first, I did not know what was happening. Then I realized my body was being drawn downward, head first. I panicked and fought, trying to grab at the sides of the vortex....

I tried to see something, but all there was to see was this cyclonic void that tapered into a funnel. I kept grabbing at the sides but my fingers had nothing to grasp. Terror set in, true terror. I saw a black spot, darker than the funnel and like a black curtain, falling in front of me. Then there was a white dot, like a bright light at the end of the funnel. But as I grew closer, it was a small white skull. It became larger, grinning at me with bare sockets and gaping mouth, and traveling straight toward me like a baseball. Not only was I terrified, I was rally livid, too, I struggled to grab hold of anything to keep me from falling, but the skull loomed larger. (Atwater, 1994, p. 30)

Ellwood further identified a possible additional type of distressing NDE, which involves a painful empathic life

review in which experiencers relive not only the details of their lives but also the impact of their acts on others, including all the suffering they had caused for other people and animals, and, in some cases, plants.

An example of a painful empathic life review was reported by a 39-year-old woman:

I remembered hearing stories of past life reviews, where your life passes before you at great speed for final review.... Mine was not a review, it was a reliving. For me, it was a total reliving of *every* thought I had ever thought, *every* word I had ever spoken, and *every* deed I had ever done; *plus* the effect of each thought, word, and deed on every-one and anyone who had ever come within my environment or sphere of influence, whether I knew them or not (including unknown passersby on the street); *plus* the effect of each thought, and deed on weather, plants, animals, soil, trees, water, and air.

It was a reliving of the total gestalt ... complete with all the consequences of ever having lived at all. No detail was left out. No slip of the tongue or slur was missed. No mistake nor accident went unaccounted for. If there is such a thing as Hell, as far as I am concerned, this was Hell.

I had no idea, no idea at all, not even the slightest hint of an idea, that every thought, word, and deed was remembered, accounted for, and went out and had a life of its own, once released; nor did I know that the energy of that life directly affected all it touched or came near. It's as if we must live in some kind of vast sea or soup of each other's energy residue and thought waves, and we are each held responsible for our contributions and the quality of "ingredients" we add.

This knowledge overwhelmed me!... There wasn't any heavenly St. Peter in charge. It was me judging me, and my judgment was most severe. (Atwater, 1988, pp. 36-37)

Rommer (2000) elaborated on this empathic life review type of distressing NDE, including terror caused by a disturbing life review with a negative judgment by a higher power, leading to overwhelming feelings of guilt. Bush (2002) later wrote that such negative judgments from a higher power could be considered a subset of hellish NDE.

Jambor (1997), based on a bliss/abyss model derived from her study of mysticism, speculated that there may be several more types of distressing NDEs, some including states beyond the sensory or conceptual.

Although Greyson and Bush (1992) did not provide

data supporting their assertion that inverted NDEs were the most common type of distressing NDE and that hellish experiences were the least common type, Lindley, Bryan, and Conley (1981) had previously reported that among 11 distressing NDEs they studied, 10 (91%) were characterized by fear, panic, or anger, and only 1 (8%) was hellish, involving hellfire and damnation. On the other hand, Rommer (2000, 2002) found among her near-death experiencers that 17 percent had inverted NDEs, 28 percent had void NDEs, 42 percent had hellish NDEs, and 14 percent had frightening life review NDEs; and more recently, Cassol et al. (2019) found that among their sample 17 distressing NDEs, 8 (47%) were inverted, 8 (47%) were hellish, and only 1 (6%) was void.

In summary, the following types of distressing NDE have been proposed:

- (1) Inverted (Greyson & Bush, 1992; Ring, 1994a);
- (2) Void (Greyson & Bush, 1992);
- (3) Hellish (Greyson & Bush, 1992), which may be a culturally-derived version of inverted NDEs (Grey, 1985; Ring, 1994a)
 - (3a) Entity-centered hellish (Ellwood, 1996)
 - (3b) Fire-centered hellish (Ellwood, 1996)
 - (3c) Vortex-centered hellish (Ellwood, 1996)
- (4) Instructional (Gibson, 1996);
- (5) Painful life review (Ellwood, 1996; Rommer, 2000, 2002), which may be a subtype of hellish NDE (Bush, 2002); and
- (6) Metasensory and metaconceptual (Jambor, 1997).

CORRELATES OF DISTRESSING NEAR-DEATH EX-PERIENCES

In an unpublished analysis of the University of Virginia NDE database, among a sample of 546 near-death experiencers, 437 (76%) reported pleasant NDEs, 58 (11%) reported distressing NDEs, and 51 (9%) reported emotionally neutral experiences.

Gender was not associated with emotional valence of the NDE (χ^2 = 1.447, df = 2, *N.S.*), nor was a happy or unhappy childhood (χ^2 = 0.225, df = 2, *N.S.*), age at the time of the NDE (*F* = 0.701; df = 2, 543; *N.S.*), years elapsed since the NDE (*F* = 2.606; df = 2, 543; *N.S.*), cause of the neardeath crisis (e.g., surgery, illness, accident) (χ^2 = 4.325, df= 6, *N.S.*), religious affiliation at the time of the NDE (χ^2 = 9.984, df = 12, N.S.), unusual stress at the time of the NDE (χ^2 = 0.451, df = 2, *N.S.*), desire to live or to die just before the NDE (χ^2 = 3.994, df = 2, *N.S.*), or mood just prior to the NDE (χ^2 = 4.009, df = 4, *N.S.*).

However, intent to fight for life or accept death just before the NDE was significantly associated with emotion-

al valence of the NDE (χ^2 = 10.887, df = 2, p = .004). Among the 68 percent of near-death experiencers who, just before the NDE, intended to let go or give in to what was happening, 87 percent reported pleasant experiences, 7 percent reported emotionally neutral experiences, and 6 percent reported distressing experiences. On the other hand, among the 32 percent of experiencers who, just before the NDE, intended to fight for life or struggle to remain in control, 71 percent reported pleasant experiences, 11 percent reported distressing experiences. This analysis supports the notion that resisting the experience and trying to stay in control increase the likelihood of a distressing NDE.

RELATIONSHIP BETWEEN DISTRESSING AND PLEASANT NEAR-DEATH EXPERIENCES

Distressing NDEs have been reported to include more phenomenological variety than do pleasant NDEs (Greyson & Bush, 1992; Rawlings, 1978). Nevertheless, there are some overarching themes in distressing NDEs that bear some similarities to, and some differences from, the overarching themes of pleasant NDEs.

Grey (1985) described a common sequence of events in distressing NDEs that included (1) fear and panic, (2) outof-body experience, (3) entering a black void, (4) sensing an evil force, and (5) entering a hell-like environment. She noted that this sequence closely paralleled the sequence Ring (1980) identified for pleasant NDEs: (1) peace and well-being, (2) out-of-body experience, (3) entering a tunnel, (4) seeing the brilliant light, and (5) entering a heavenly environment.

Irwin and Bramwell (1988) compared and contrasted the parallel phenomena of pleasant and distressing NDEs. They noted that both types may include out-of-body experiences, moving through a tunnel or dark void, contact with a being of light, and entry into a transcendental realm, where they may meet deceased spirits and religious figures. They noted that in pleasant NDEs, contact with a divine being of light may include a feeling of unconditional love and acceptance of their past behaviors, good and bad, whereas in distressing NDE, contact with a divine being is likely to involve a sense of being judged negatively for past deeds. In pleasant NDEs, passage through a tunnel or dark area is often in an upward direction, whereas in distressing NDEs, the movement is commonly downward. Most critically, the transcendental realm of pleasant NDEs is often described as "heavenly" or as a pastoral setting of preternatural beauty, whereas the transcendental realm of distressing NDEs is typically a "hellish" place: a dark, dank, misty cave or lake of fire and brimstone, with the devil or other menacing demonic figures.

Atwater (1992) also noted consistent settings and elements in heavenly and hellish NDEs, but with contrasting details. She wrote that hellish experiences included lifeless or threatening apparitions, in contrast to the friendly beings of heavenly NDEs; barren or ugly expanses, in contrast to the beautiful environments of heavenly NDEs; threats, screams, and silence, in contrast to the conversations and dialogue of heavenly NDEs; danger and the possibility of violence and torture, in contrast to the total acceptance and overwhelming sensation of love in heavenly NDEs; and a feeling of coldness, in contrast to a feeling of warmth in heavenly NDEs. She noted furthermore that the same details can be experienced as wonderfully positive by some people and as horrific by others, such as a light at the end of a tunnel or a voice in the darkness.

Cassol et al. (2019) noted little difference in content between pleasant and distressing NDEs. Most notably, they reported that pleasant and distressing NDEs had comparable scores on the NDE Scale; pleasant NDEs had a higher score than distressing NDEs only on the affective component subscale (p < .0001).

On the other hand, our unpublished data from the University of Virginia NDE database do show a significant difference in NDE Scale sores between pleasant and distressing NDEs. Mean scores on the NDE Scale (Greyson, 1983) were 16.60 (S.D. = 6.64) for those NDErs with a pleasant experience, 9.65 (S.D. = 7.18) for those with an emotionally neutral experience, and 8.78 (S.D. = 5.15) for those with a distressing experience. This difference between groups was statistically significant (F = 56.153; df = 2, 543; p <.001). A similar hierarchy was found between the groups for the cognitive, affective, paranormal, and transcendental factors of the NDE Scale, with NDErs with a pleasant experience showing the highest scores and those with emotionally neutral and distressing experiences showing equivalent lower scores, all significant at p < .001 (cognitive factor: F = 12.753; affective factor: F = 131.612; paranormal factor: F = 7.326; transcendental factor: F = 26.051).

Nancy Evans Bush and I compiled a list of 64 features that we hypothesized might differentiate distressing from pleasant NDEs, based on the accumulated literature and on our experience interviewing NDErs. Of those 64 features, only 17 showed statistical differences between pleasant and distressing NDEs, after applying a Bonferroni correction for multiple simultaneous tests. Thirteen of those features were more common in distressing NDEs, and 4 were more common in pleasant NDEs.

Features that were statistically more common in distressing NDEs (p < .001) included:

1. Being in Hell or a place of torment ($\chi^2 = 20.574$, df = 2); 2. Heading toward Hell or a place of torment but not reaching it (χ^2 = 34.628, df = 2);

- 3. A terrifying, horrible, or painful separation from the body $(\chi^2 = 15.713, df = 2);$
- 4. Any other terrifying, horrible, or painful incident during the NDE (χ^2 = 44.826, df = 2);
- 5. Being cold (χ^2 = 18.760, df = 2);
- 6. Feeling fear, dread, terror, or panic ($\chi^2 = 87.205$, df = 2);
- 7. Feeling horror, disgust, or repulsion ($\chi^2 = 21.363$, df = 2);
- 8. Feeling despair or hopelessness ($\chi^2 = 31.228$, df = 2);
- Trying to scream or cry out, but being unable to make any sound (χ² = 30.922, df = 2);
- 10. Feeling that the experience would never end or would repeat itself forever ($\chi^2 = 14.249$, df = 2);
- 11. Trying to escape by fighting, running, or climbing out (χ^2 = 41.436, df = 2);
- 12. Trying to get back in control of your situation yourself $(\chi^2 = 31.357, df = 2)$; and
- 13. A sense that you would be completely annihilated or cease to exist ($\chi^2 = 30.923$, df = 2).

Features that were statistically more common in pleasant NDEs (p<.001) included:

- 1. Being in outer space, or in the heavens, or in the sky (χ^2 = 15.653, df = 2);
- 2. Seeing a radiant light ($\chi^2 = 25.603$, df = 2);
- 3.Seeing a "being" of light ($\chi^2 = 16.203$, df = 2); and
- 4. Being with a benevolent guide ($\chi^2 = 50.180$, df = 2).

Features that, contrary to our expectations, did not differentiate pleasant and distressing NDEs included: being in a void or empty space; hearing wails, moans, gnashing of teeth, or sounds of torment; being in a pit, cave, or tunnel; being in darkness without any light; being encompassed or engulfed by light, or becoming part of the light; rising or moving upward; falling or moving downward; feeling a magnetic pull or suction of some kind; being hot; being someplace wet, slimy, or being submerged in water; being totally alone; being with grotesque or terrifying creatures; being laughed at or mocked; feeling exhaustion or weariness; spinning out of control; complete absence of any sensations; feeling no control over what was happening; being rescued from your situation; arguing or pleading your case; begging for mercy; praying for help; being told or having a sense that your life was a game or a joke; being told or having a sense that you were about to lose all sense of personal identity; being told or having a sense that nothing Earthly ever existed or was real; being told or having a sense that you had imagined your hallucinated your entire Earthly life; feeling your type of experience was related to your actions or lifestyle; feeling your type of experience was related to your religious faith; feeling your type of experience was related to your beliefs and attitudes; feeling your type of experience was related to a physiological accident; feeling your type of experience was related to something else about your or your situation; feeling your type of experience was related to some universal truth not specific to you; and feeling your type of experience was related to chance.

PROPOSED EXPLANATIONS FOR DISTRESSING NEAR-DEATH EXPERIENCES

From the hundreds of NDE accounts in the University of Virginia NDE database, and the investigations of other near-death researchers, no obvious factor has emerged to explain why some people have pleasant, even blissful NDEs, while others have distressing, even terrifying ones. The meager amount of evidence we have from distressing NDEs at this point suggests that they can occur under the same conditions as do pleasant NDEs. We have no data to explain why some people have distressing NDEs while others have pleasant ones. Despite the paucity of data, however, several researchers have offered theoretical speculations to explain the type of NDE an experiencer may have.

Personal Characteristics

Some researchers have suggested that the experiencers' personal characteristics play a role in bringing about distressing NDEs. Rawlings argued that all those who have not acknowledged Jesus as Savior and accepted His death on the cross as a substitute punishment for their own sins will have a hellish NDE, and, indeed, a hellish eternal afterlife, however good and admirable their lives had been. He regarded the unconditional divine love reported in most pleasant NDEs as a deceit of the devil (Ellwood, 1996). But the data do not support Rawlings' assertions. In an unpublished analysis of 443 NDErs from the University of Virginia database, the rate of distressing NDEs was 13 percent among those who were Roman Catholics at the time of their NDE, 9 percent among Protestants, 8 percent among Jews, 6 percent among atheists, and 6 percent among agnostics, which were not significantly different. In aggregate, distressing NDEs were reported by 11 percent of the Christians and by 9 percent of the non-Christians (χ^2 = 4.50, df = 2, N.S.).

Neither is it true that people who live "saintly" lives always have pleasant NDEs while "bad" people always have distressing ones. Throughout history, revered mystics like the 16th-century Saints Teresa of Ávila (Teresa of Ávila, 1912/1577) and John of the Cross (John of the Cross, 1905/1584), and the 20th-century Mother Teresa of Calcutta (Teresa of Calcutta, 2007) described their "dark night of the soul" as a necessary first stage on the path to union with the Divine. On the other hand, there are accounts of blissful NDEs from career criminals, including murderers serving life sentences in prison (Greyson, 2021).

Atwater (1992) wrote that distressing or hell-like NDEs were usually experienced by people who have deeply suppressed or repressed guilts, fears, and angers, and/or those who expected some kind of punishment or accountability after death; although Bush (2002) later noted that everyone has deeply suppressed or repressed guilt, fears, and anger, and that many people who do also report pleasant NDEs. Greyson and Bush (1992) suggested that inverted NDEs might be associated with fear of losing one's ego, which leads to resisting the NDE rather than surrendering to it, creating a fear that pervades the entire experience. Bush (2002) noted that there is abundant evidence across centuries and continents to corroborate that idea. In support of that notion, Greyson and Bush (1992) pointed to the conversion of distressing inverted NDEs to pleasant experiences once the experiencers eventually exhaust their resistance and let go. Bush (2002) later argued that resisting a distressing NDE is likely to intensify fearfulness in experiencers. Kungurtsev (1991) noted a parallel dynamic in ketamine-induced NDE-like experiences, reporting that people who are very controlling and have difficulty letting go often have distressing experiences, as the dissolving of the individual sense of self is perceived as horrifying, whereas people who are more relaxed and able to surrender usually have blissful or ecstatic experiences.

Rommer (2000, 2002) suggested that experiencers are responsible for the content and imagery of distressing NDEs (and also of pleasant NDEs), in that they see, hear, and feel what they need in order to reevaluate their lives. She identified four reasons why experiencers might have a distressing NDE: (1) to challenge the experiencers to reevaluate their lives and make necessary changes; (2) if the experiencers' mindset going into the NDE was fear-based; (3) if the experiencers were raised to expect Hell, fire, and brimstone; and (4) so the experiencers could act as a moral messenger to others.

Ring (1994a) argued that "frightening NDEs are themselves illusory phastasmagories thrown up by the ego in response to the threat of its own seeming imminent annihilation" (p. 22). He cited support for that perspective in A *Course in Miracles* (Schucman, Thetford, & Wapnick, 1975), which posits that the only thing that is real is divine love and acceptance and that anything else, including your ego, is an illusion. In this understanding, distressing NDEs, being rooted in fear of the ego being dissolved, are essentially illusions, whereas pleasant NDEs, being rooted in a realm of love and acceptance, are real.

Jambor (1997) argued that both pleasant and dis-

tressing NDEs hinted at the same ultimate reality, viewed through the experiencers' individual colored glasses of bliss or horror. Modeling her understanding of NDEs on the bliss/abyss duality derived from various mystical traditions, she conceptualized the ultimate reality as being beyond any pair of opposites, such as bliss and abyss. In her view, pleasant (bliss) and distressing (abyss) NDEs are parallel paths that both lead to the indivisible wholeness of ultimate reality.

Biological Factors

Other researchers have suggested that distressing NDEs are not ontologically real in the sense that pleasant NDEs are, but are rather illusions or hallucinations. Rogo (1979) argued that distressing NDEs may be hallucinations produced by the experiencer's mind in reaction to violent resuscitation procedures such as chest pounding and electrical shock.

Ring (1994a, 1996) argued that distressing void NDEs could be understood as emergence reactions to inadequate anesthesia, citing examples of drug-induced states that had similar sensations of being in an endless void and coming to a realization that life ever existed but was only an illusion. He did allow, however, that drugs may simply trigger the distressing experience but not directly cause it, and that distressing NDEs have psychological reality of great consequence (Ring, 1994b).

Bache (1994, 1996) agreed with Ring that distressing NDEs do not have the same ontological significance as pleasant NDEs, but are rather shadows of the ego, just as illusory as is the ego itself. He offered an understanding of distressing NDEs based in the perinatal symptomatology outlined by Grof (1975), which involves not personal characteristics but rather universal biological imperatives. The perinatal level of consciousness, in Grof's paradigm, focuses on universal experiences, including existential despair, such that the resistance to ego death is not an individual character trait but rather an experience embedded in our collective unconscious. But properly seen, this terrifying experience is not a punishment but rather a purification that leads to spiritual growth. Bache proposed that pleasant and distressing NDEs are two aspects of the same underlying process, but that distressing experiences represent a truncated form when the dying process is interrupted before it progresses to a pleasant NDE. If allowed to run their full course, NDEs culminate in ego death followed by spiritual rebirth; it is the ego's resistance to its annihilation that makes that portion of the NDE distressing. The dilemma for an understanding based on universal perinatal levels of consciousness is why all NDEs do not start with a terrifying sense of existential despair.

Circumstantial Factors

Still other researchers have suggested that the distressing quality of some NDEs is due not to personal traits or to biological mechanisms, but rather to the circumstances of the near-death crisis. Lindley, Bryan, and Conley (1981), note that the distressing stage of NDEs often comes at the beginning of an NDE, before the transition into a pleasant experience, or at the end of a pleasant NDE, in the transition back to normal waking consciousness, suggested that the distressing experience is a product of the process of transitioning to and from a pleasant NDE. They speculated that this distressing state was comparable to the anxiety of a flight-or-fight reaction and conjectured that this transitional distressing experience might have been the source of the mythological "fall from grace."

Garfield (1979) speculated that the context of the neardeath event might play a role in whether the experience is pleasant or distressing, just as it does with hypnotic, meditative, and psychedelic-altered states of consciousness. He recommended a caring environment, including supportive family and friends, in order to minimize the likelihood of a distressing NDE.

In keeping with this focus on the context of the neardeath event, Cassol et al. (2019) reported that 4 of their 17 near-death experiences who had distressing NDEs (24%) had them associated with a suicidal attempt, contrasted to only 1 of their 106 near-death experiencers who had pleasant NDEs (1%). However, studies specifically examining NDEs associated with attempted suicide have shown no phenomenological difference between those and other NDEs, including the emotional tone of the experience (Ring & Franklin, 1982; Rosen, 1975). Gibson (1996) found that whether suicide attempters had pleasant or distressing NDEs seemed to depend on what they needed at the time to turn their lives around. Among 546 participants in the University of Virginia NDE database, 3 out of 58 NDErs with distressing NDEs had attempted suicide (5%), contrasted with 15 out of 422 NDErs with pleasant NDEs (4%) and none of the 51 NDErs with emotionally neutral NDEs. That difference was not statistically significant ($\chi^2 = 2.404$, df = 2; p = .301).

Given the empirical (albeit limited) and theoretical support for these varied proposed explanations, it is likely that there is no single path to distressing NDEs but rather a convergence of factors that may play a role in influencing the emotional valence of a near-death experience.

AFTEREFFECTS OF DISTRESSING NEAR-DEATH EX-PERIENCES

Cassol et al. (2019) reported that distressing NDEs are remembered subsequently with as much overall phenom-

enological detail, clarity, and sensory and emotional detail as are pleasant NDEs; and that NDErs with pleasant and distressing experiences have comparable confidence in their memories of the event and assign comparable personal importance to the experience.

Clark (cited in Flynn, 1986, pp. 83-86) implied that, unlike pleasant NDEs that often enhance a universal or nonsectarian spirituality, distressing NDEs tend to lead experiencers to a strict Bible-based Christianity.

Many researchers have reported that pleasant or heavenly NDEs are associated with far more permanent aftereffects than are distressing or hellish NDEs, and some have attributed that difference to the reluctance of NDErs who have a distressing experience to focus on it, suppressing the aftereffects (Atwater, 1992). Reluctance to face frightening NDEs may lead to long-lasting emotional trauma, with difficulty integrating the experience and development of a sense of stigma (Bush & Greyson, 2014). Alternatively, some experiencers regard a distressing NDE as a warning about unwise behavior and a message to turn their lives around, or by treating it as if it did not matter (Bush & Greyson, 2014; Greyson & Bush, 1992).

Unpublished findings from the University of Virginia NDE database corroborate this observation that pleasant NDEs are associated with more profound life changes than are distressing NDEs. We administered Ring's Life Changes Inventory—Revised (LCI-R; Greyson & Ring, 2004) to 448 near-death experiencers, of whom 367 (82%) reported pleasant experiences, 39 (9%) reported emotionally neutral experiences, and 42 (9%) reported distressing experiences. The absolute change score on the LCI-R was 1.18 (on a scale of +2 to -2) for those with pleasant NDEs, 0.87 for those with emotionally neutral NDEs, and 0.95 for whose with distressing NDEs (F = 9.280; df = 2, 445; p < .001).

This finding of more profound changes after pleasant as contrasted to distressing NDEs was also seen in 6 of the 9 factors of the LCI-R at a significance of p < .001, after applying a Bonferroni correction for multiple simultaneous tests: appreciation of death (F = 16.308), spirituality (F =15.169), concern for others (F = 11.736), appreciation for life (F = 9.190), quest for meaning (F = 8.270), and self-acceptance (F = 7.727). The remaining 3 factors showed no significant differences between pleasant and distressing experiences: concern with worldly achievement (F = 6.270), religiousness (F = 2.377), and concern with social/planetary matters (F = 2.138).

In the 2023 unpublished qualitative analysis of distressing NDEs from Lund University (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University), 6 of their 8 analyzed narratives mentioned aftereffects, in which they found three themes: the positive effect of being "high on life" (in 2 narratives), the negative effect of not being understood when they tried to recount their experiences (in 3 narratives), and the negative effect of being left with long-term negative emotions to process (in 4 narratives.

RESOLVING DISTRESSING NEAR-DEATH EXPERI-ENCES

As noted in the Introduction, the topic of distressing NDEs is so laden with anxiety and judgmentalism that it is difficult for many experiencers to focus on them or to disclose them to others. When most NDErs report pleasant experiences, it is hard for people who have distressing NDEs to avoid feeling that the experience was a devastating commentary on their lives, that they were singled out for a harsher experience by some higher power or because of some personal character flaw (Bache, 1994). As Bush put it, "We assume in our bones that people get what they deserve" (2002, p. 110). As a result, many experiencers who had distressing NDEs either repress the memory or struggle to make sense of it.

Bush (2002, 2012) made the salient point that one's explanation for how distressing NDEs come about is largely irrelevant to how experiencers can make sense of them. She noted that whatever the precipitant for a distressing NDE, such as a drug effect or an expectation of eternal punishment, the precipitant is not the experience. Regardless of the explanatory model, the memory of a distressing NDE, with its accompanying destruction of former patterns and concepts, remains vividly embedded in the experiencers' reality of everyday functioning and must be dealt with in those terms.

Bush outlined three types of responses distressing NDErs often use to make sense of their experience, if they do not succeed in repressing the memory entirely (Bush, 2002, 2012). First, experiencers may respond to a distressing NDE by viewing it as a warning to turn their lives around. If they are able to identify past behaviors they regard as unwise or wrong, they find ways to modify their lives and make amends. Bush found this response most often among experiencers who had an explicitly hellish NDE, and felt they had been given a second chance to craft a more deserving life.

A second response some distressing NDErs use is to reduce the experience to a materialistic cause, a familiar precipitant less troublesome than their own character or behavior. What this response does is to push the experience itself into the background in favor of focusing on the naturalistic cause. This assigns the distressing NDE no particular meaning other than a physiological accident, such as a drug reaction, which for some distressing NDErs is more palatable than trying to find some meaning in the experience through self-examination. This reaction is satisfying for some distressing NDErs in the short term, masking questions and anxieties about the meaning of the experience, but it does not resolve those issues in the long term.

A third response, if experiencers cannot view the distressing NDE as a warning to turn their lives around or reduce it to a meaningless accident, is to embark on a long-term struggle with the existential implications of the experience. Bush found this response to be the most common after void NDEs, and among reflective experiencers haunted by the existential dimensions of the event. They tend to reject a literal reading of the distressing NDE as a warning and a reductionistic explanation as inadequate, because those responses assign a *cause* for the distressing NDE but do not address its *meaning*. Instead, they view the distressing NDE as a different kind of spiritual experience, which, just like pleasant NDEs, has meaning, purpose, and value.

Guidebooks throughout the centuries, including the Egyptian Book of the Dead (Budge, 1898/16th century B.C.), The Tibetan Book of the Dead (Evans-Wentz, 1957/11th century), and the medieval European Ars Moriendi (Rylands and Bullen, 1881/15th century), warned those preparing for death to avoid denial and instead to recognize dying as an opportunity for liberation (Bush, 2002). The German Catholic mystic Eckhart von Hochheim taught that the only thing that burns in Hell is the part of us that won't let go of our lives: our memories and attachments. Hell burns them away, not to punish us, but to free our souls. If we're frightened of dying and we're holding on, we'll see devils tearing our lives away; but if we've made our peace, then the devils are really angels, freeing us from the Earth (von Hochheim, 1981). Bush (1994) argued that the task of making sense of distressing NDEs is not to deny or ignore them, but to come to terms with the power of the dark. The goal is not to destroy the ego, but rather to redeem it, to recognize that you are not who you thought you were. She acknowledged, however, that such a struggle may not be fruitful for every experiencer. Unless experiencers are already comfortable with the idea of the material world and the ego being illusions, solutions based on ego death may create more anxiety than enlightenment.

Bush (2002, 2012) noted that experiencers of distressing NDEs can find enormous healing potential in the archetype of the hero's or heroine's journey as described by Campbell (1968), in which the hero or heroine suffers excruciating pain, perhaps being tortured or battling horrific monsters, before escaping and defeating the enemy and obtaining the magnificent treasure the monsters had been guarding (Ellwood, 1996). This requires experiencers to recast their assumptions that pain is equivalent to punishment, that suffering is itself malevolent, and that there is no gift in the darkness. The elements in the hero's or heroine's journey form the template of many distressing NDEs: the challenges by terrifying entities with great powers, the need for courage and resourcefulness in facing them, the finding of the gift within the experience that is needed for resolution, and the struggle to return home. Bush (2002, 2012) pointed out that these mythical voyages, which are never easy but always worthwhile, are stories of the *hero's* journey, not the loser's journey or the damned's journey.

Ellwood (1996), echoing this guidance from the worldwide books of the dead, advised that once experiencers overcome their fear and revulsion of demonic beings in a distressing NDE and accept those entities as destroyers of the experiencers' illusory ego, they can unite with the Clear Light of the Void. Likewise, she noted that in the hellish visions of the "dark night of the soul" described by John of the Cross (1905/1584) and 17th-century Lutheran mystic Jacob Boehme (1978/1624), the void was not ultimate meaninglessness, but rather the Divine seen from the back; and the hellfire and heavenly light were not irreconcilable opposites but rather necessary stages in the spiritual journey that ended in the ultimate union of fire and light as perfect divine love.

In conclusion, Bush (2002, 2012) advised that there is no one right way for experiencers to find meaning in their distressing NDEs. The experiencers' understanding of "self" and "reality," their temperament, and their experience may play a role in finding the most helpful path, whether that be through reforming their behavior in response to the warning of their distressing NDE, through understanding the distressing NDE as a meaningless accident, or through struggling with the existential meaning of the distressing NDE.

DISCUSSION: CONFOUNDING EFFECTS OF SAM-PLES AND DEFINITIONS

Cassol, et al. (2019) found no statistical difference on the NDE Scale between NDErs with pleasant or distressing NDEs, with the expected exception of the affective factor. This is contradicted by the data from the University of Virginia collection of NDErs, which did show those with pleasant experiences scoring higher on the NDE Scale and on each of the four factors than did those with distressing experiences. This contradiction may be associated with the larger sample in the University of Virginia database (58 distressing experiences and 437 pleasant experiences) than in that of Cassol et al. (2019) (17 distressing experiences and 106 pleasant experiences).

Alternatively (or in addition), it may be associated with the different criteria for identifying distressing NDEs. Cas-

sol et al. (2019) based their identification of distressing experiences on NDErs' rating on the Memory Characteristics Questionnaire of their emotion when the event happened; whereas in the University of Virginia database, distressing experiences were identified based on NDErs' rating of whether their NDE was predominantly pleasant, emotionally neutral, or unpleasant.

Finally, the difference between Cassol et al.'s findings and the University of Virginia's may be related to the source of the two samples. Cassol et al. (2019) included participants from European countries, where the majority described themselves as Catholic, whereas the University of Virginia database included participants primarily from the United States, where the majority describe themselves as Protestant. Furthermore, Cassol et al. (2019) included only NDEs following severe brain injury, coma, and intensive care unit hospitalization, whereas the University of Virginia collection included NDEs from a wide variety of injuries, accidents, and illnesses.

The difference in religious affiliation between the samples of Cassol et al. (2019) and of Greyson and Bush (1992) may also contribute to the higher prevalence of hellish NDEs reported by Cassol et al. (2019), consonant with Ring's (1994a) conjecture that hellish NDEs are culturally-derived elaborations of inverted NDEs. Supporting that conjecture is that the NDEr database of Rommer (2000, 2002), who found hellish NDEs to be the most common type of distressing NDE, included three times as many Catholics as Protestants, and she herself concluded that religious indoctrination played a role in the type of NDE an experiencer had. The difference in religious affiliation may also contribute as well as to the higher rate of distressing NDEs associated with attempted suicide in the study by Cassol et al. (2019).

IMPLICATIONS AND APPLICATIONS

Much has been learned in recent years about the prevalence and phenomenology of distressing NDEs. I have described what we know of the prevalence, phenomenology, typology, correlates, possible causes, aftereffects, and common responses of experiencers to distressing NDEs. Yet much research needs to be done, particularly regarding their connection to the more common pleasant NDEs, the possible precipitants of distressing experiences, and their effect on experiencers' subsequent values, beliefs, and attitudes toward life and death. This summary reflects my interpretation of the data, meager as it is. Explorations into the phenomenology of other types of dark spiritual experience may shed light on the imagery of distressing NDEs. For example, sleep paralysis has been found to be more common in near-death experiencers, and both experiences have a common link to REM intrusion (Nelson, Mattingly, Lee, et al., 2006), but phenomenological similarities between the two experiences have not been investigated. Likewise, the content of NDEs and that of psychedelic drug experiences may both be influenced by context (Garfield, 1979); and Ring (1994a, 1994b, 1996) noted that distressing void NDEs share some common sensations with drug-induced states, suggesting that further exploration of psychedelic experiences may help us understand the phenomenology of distressing NDEs. Additional findings from future research into distressing NDEs may well yield different understandings of the different possible causes or precipitants, and the different ways experiencers react to, these distressing but profound spiritual experiences.

REFERENCES

- Atwater, P. M. H. (1988). Coming back to life: The after-effects of the near-death experience. Dodd, Mead.
- Atwater, P. M. H. (1992). Guest editorial: Is there a hell? Surprising observations about the near-death experience. *Journal of Near-Death Studies, 10,* 149-160. https://doi. org/10.17514/JNDS-1992-10-3-p149-160
- Atwater, P. M. H. (1994). Beyond the light: What isn't being said about the near-death experience. Birch Lane Press.
- Auchmutey, J. (1979). Is Hell for real? Presbyterian Survey, 69(1), 9-11.
- Bache, C. M. (1994). A perinatal interpretation of frightening near-death experiences: A dialogue with Kenneth Ring. Journal of Near-Death Studies, 13, 25-45. https:// doi.org10.17514/JNDS-1994-13-1-p25-45
- Bache, C. M. (1996). Expanding Grof's concept of the perinatal: Deepening the inquiry into frightening near-death experiences. *Journal of Near-Death Studies*, 15, 115-139. https://doi.org/10.17514/JNDS-1996-15-2-p115-139
- Boehme, J. (1978). *The way to Christ.* Paulist Press. (Original work published 1624.)
- Bonenfant, R. J. (2001). A child's encounter with the devil: An unusual near-death experience with both blissful and frightening elements. *Journal of Near-Death Studies, 20, 87-100.* https://doi.org/10.17514/JNDS-2001-20-2-p87-100
- Budge, E. A. W. (1898). *The book of the dead: The papyrus of Ani*. Kegan Paul, Trench, Trübner. (Original work written 16th century B.C.)
- Bush, N. E. (1994). The paradox of Jonah: Response to "Solving the riddle of frightening near-death experiences." Journal of Near-Death Studies, 13, 47-54. https:// doi.org/10.17514/JNDS-1994-13-1-p47-54
- Bush, N. E. (2002). Afterward: Making meaning after a frightening near-death experience. *Journal of Near-*

Death Studies, 21, 99-133. https://doi.org/10.17514/ JNDS-2002-21-2-p99-133

- Bush, N. E. (2009). Distressing Western near-death experiences: Finding a way through the abyss. In Holden, J.
 M., Greyson, B., and James, D. (Eds.), *The handbook of near-death experiences: Thirty years of investigation* (pp. 63-86). Praeger/ABC-CLIO.
- Bush, N. E. (2012). Dancing past the dark: Distressing neardeath experiences. Parson's Porch.
- Bush, N. E. (2021). More comments on the new NDE-C scale [Letter]. Journal of Near-Death Studies, 39, 55-58. https:// doi.org/10.17514/JNDS-2021-39-1-p55-58
- Bush, N. E., & Greyson, B. (2014). Distressing near-death experiences: The basics. *Missouri Medicine*, 111, 372-376. U.I.: 25665233
- Campbell, J. (1968). The hero with a thousand faces. World.
- Cassol, H., Martial, C., Annen, J., Martens, G., Charland-Verville, V., Majerus, S., and Laureys, S. (2019). A systematic analysis of distressing near-death experience accounts. *Memory*, *27*, 1122-1129. https://doi.org/10.1080 /096582111.2019.1626438
- Charland-Verville, V., Jourdan, J.-P., Thonnard, M., Ledoux, D., Donneau, A.-F., Quertemont, E., and Laureys, S. (2014). Near-death experiences in non-life-threatening events and coma of different etiologies. *Frontiers in Human Neuroscience, 8*, Article 203. https://doi. org/10.3389/fnhum.2014.00203
- Delacour, J.-B. (1974). Glimpses of the beyond: The extraordinary experiences of people who crossed the brink of death and returned. (Garside, E. B., Trans.). Dell. (Original work published in German in 1973 as Aus dem Jenseits Zurück.)
- Ellwood, G. F. (1996). Distressing near-death experiences as photographic negatives. *Journal of Near-Death Studies, 15,* 83-114. https://doi.org/10.17514/JNDS-1996-15-2-p83-114
- Ellwood, G. F. (2001). The uttermost deep: The challenge of near-death experiences. Lantern Books.
- Evans-Wentz, W. Y. (Trans.). (1957). *The Tibetan book* of the dead (3rd ed). Oxford University Press. (Original work written 11th century.)
- Flynn, C. P. (1986). After the beyond: Human transformation and the near-death experience. Prentice-Hall.
- Gallup, G., & Proctor, W. (1982). Adventures in immortality: A look beyond the threshold of death. McGraw-Hill.
- Garfield, C. A. (1979). The dying patient's concern with "life after death." In Kastenbaum, R. (Ed.), *Between life and death* (pp. 45-60) Springer.
- Gibson, A. S. (1996). Commentary on "Frightening neardeath experiences." Journal of Near-Death Studies, 15,141-148.https://doi.org/10.17514/JNDS-1996-15-2-p141-148

- Grey, M. (1985). Return from death: An exploration of the near-death experience. Arkana.
- Greyson, B. (2021). After: A doctor explores what near-death experiences reveal about life and beyond. St. Martin's Essentials. https://doi.org/10.17514/JNDS-2021-39-3-p184-194.
- Greyson, B., & Bush, N.E. (1992). Distressing near-death experiences. *Psychiatry*, *55*, 95-110. https://doi.org/10 .1080/00332747.1992.11024583
- Grof, S. (1975). Realms of the human unconscious. Dutton.
- Grosso, M. (1981). Toward an explanation of near-death phenomena. *Journal of the American Society for Psychical Research, 75,* 37-60.
- Irwin, H. J., & Bramwell, B. A. (1988). The devil in heaven: A near-death experience with both positive and negative aspects. *Journal of Near-Death Studies*, 7, 38-43. https://doi.org/10.17514/JNDS-1988-7-1-p38-43
- Jambor, M. (1997). The mystery of frightening transcendent experiences: A rejoinder to Nancy Evans Bush and Christopher Bache. *Journal of Near-Death Studies*, 16, 163-176. https://doi.org/10.17514/JNDS-1997-16-2-p163-176
- John of the Cross. (1905). *Dark night of the soul.* John M. Watkins. (Original work written 1584.)
- Kungurtsev, I. (1991). "Death-rebirth" psychotherapy with ketamine. Bulletin of the Albert Hofmann Foundation, 2(4), 2-6.
- Lindley, J. H., Bryan, S., & Conley, B. (1981). Near-death experiences in a Pacific Northwest American population: The Evergreen study. Anabiosis: The Journal of Near-Death Studies, 1, 104-124. https://doi.org/10.17514/ JNDS-1981-1-2-p104-124
- Martial, C., Simon, J., Puttaert, N., Gosseries, O., Charland-Verville, V., Nyssen, A.-S., Greyson, B., Laureys, S., & Cassol, H. (2020). The Near-Death Experience Content (NDE-C) Scale: Development and psychometric validation. *Consciousness and Cognition*, 86, Article 103049. https://doi.org/10.1016/j.concog.2020.103049
- Nelson, K. R., Mattingly, M., Lee, S. A., & Schmitt, F. A. (2006). Does the arousal system contribute to near death experience? *Neurology*, 66, 1003-1009. https:// doi.org/10.1212/01.wnl.0000204296.15607.37

Rawlings, M. (1978). Beyond death's door. Thomas Nelson. Rawlings, M. (1980). Before death comes. Thomas Nelson.

- Ring, K. (1980). Life at death: A scientific investigation of the near-death experience. Coward, McCann and Geoghe-gan.
- Ring, K. (1994a). Solving the riddle of frightening neardeath experiences: Some testable hypotheses and a perspective based on *A course in miracles. Journal of Near-Death Studies*, 13, 5-23. https://doi.org/10.17514/

JNDS-1994-13-1-p5-23

- Ring, K. (1994b). Frightening near-death experiences revisited: A commentary on the responses to my paper by Christopher Bache and Nancy Evans Bush. *Journal of Near-Death Studies*, 13, 55-64. https://doi. org/10.17514/JNDS-1994-13-1-p55-64
- Ring, K. (1996). A note on anesthetically-induced frightening "near-death experiences." *Journal of Near-Death Studies*, 15, 17-23. https://doi.org/10.17514/JNDS-1996-15-1-p17-23
- Ring, K., & Franklin, S. (1982). Do suicide survivors report near-death experiences? *Omega: Journal of Death and Dying, 12,* 191-208. https://doi.org/10.2190/47xbegmr-9wkp-h3bx
- Rogo, D. S. (1979). *Return from silence: A study of near-death experiences*. Aquarian Press.
- Rommer, B. (2000). Blessing in disguise: Another side of the near-death experience. Llewellyn.
- Rommer, B. (2002). The frightening near-death experience: A catalyst for positive spiritual transformation. *Journal* of Religion and Psychical Research, 25, 9-18.
- Rosen, D. H. (1975). Suicide survivors: A follow-up study of persons who survived jumping from the Golden Gate and San Francisco Bay Bridges. Western Journal of Medicine, 122, (4), 289-294.
- Rylands, W. H., & Bullen, G. (Eds.). (1881). Ars Moriendi. Holbein Society/ Wyman. (Original work written 15th century.)

- Sabom, M. B. (1979). Review of Beyond death's door. Anabiosis: The Journal of Near-Death Studies, 1(3), 9.
- Sabom, M. B (1982). *Recollections of death: A medical investigation*. Harper and Row.
- Schucman, H., Thetford, B., & Wapnick, K. (Eds.). (1975). A *course in miracles*. Foundation for Inner Peace.
- Teresa of Ávila. (1912). *Interior castle*. Benzinger Brothers. (Original work written 1577.)
- Teresa of Calcutta. (2007). *Come be my light*. Doubleday.
- von Hochheim, E. (1981). Meister Eckhart: The essential sermons, commentaries, treatises and defense. (B. McGinn, & E. Colledge, Trans. and Eds.). Paulist Press. (Original work written 13th century.)
- Zaleski, C. (1987a). Evaluating near-death testimony: A challenge for theology. *Anabiosis: The Journal of Near-Death Studies, 5*(2), 17-52. https://doi.org/10.17514/JNDS-1987-5-2-p17-52
- Zaleski, C. (1987b). Otherworld journeys: Accounts of neardeath experience in medieval and modern times. Oxford University Press.