

Why Materialist Science cannot Explain Near-Death Experiences

In March 1987 Dawn Gillott was admitted to Northampton General Hospital, seriously ill with pneumonia. After being placed in intensive care, the physicians decided to perform a tracheotomy because she could not breathe.

The next thing I was above myself near the ceiling looking down. One of the nurses was saying in what seemed a frantic voice, 'Breathe, Dawn, breathe.' A doctor was pressing my chest, drips were being disconnected, everyone was rushing round. I couldn't understand the panic, I wasn't in pain. Then they pushed my body out of the room to the theatre. I followed my body out of the ITU and then left on what I can only describe as a journey of a lifetime.

I went down what seemed like a cylindrical tunnel with a bright warm inviting light at the end. I seemed to be traveling at quite a speed, but I was happy, no pain, just peace. At the end was a beautiful open field, a wonderful summery smell of flowers. There was a bench seat on the right where my Grandfather sat (he had been dead seven years). I sat next to him. He asked me how I was and the family. I said I was happy and content and all my family were fine.

He said he was worried about my son; my son needed his mother, he was too young to be left. I told Grampy I didn't want to go back, I wanted to stay with him. But Grampy insisted I go back for my children's sake. I then asked him if he would come for me when my time came. He started to answer, 'Yes, I will be back in four' -- then my whole body seemed to jump. I looked round and saw that I was back in the ITU.

I honestly believe in what happened, that there is life after death. After my experience I am not afraid of death as I was before my illness. [\[i\]](#)

The near-death experience described above is not rare. Hundreds of similar cases - involving people reporting that while seriously ill or injured they left their bodies, observed the surrounding scene, entered a tunnel, emerged in another world where they met deceased friends or relatives before returning to their bodies - have been carefully documented in several different countries. The case above is not even a particularly impressive one. At first glance, such cases seem to indicate that under life-threatening circumstances the conscious part of us is capable of detaching from our physical bodies, and may travel to another world. The overwhelming majority of those who have had such experiences are utterly convinced of the existence of an afterlife.

However, there are those that disagree, and who argue that such experiences simply cannot be what they at first seem to be.

I began research into my recent book *Science and the Near Death Experience* by examining the question of whether or not consciousness depends upon the brain. Various materialist theories to that effect were examined, and I found that all the arguments for the dependence of the mental on the physical – such as the effects of age, disease, brain damage and drugs on the mind – are all based on an unstated assumption.

The implicit assumption made in all the materialist arguments was that the relationship between brain activity and consciousness was always one of cause to effect, and never that of *effect to cause*. But this assumption is not known to be true, and it is not the only conceivable one consistent with the observed facts mentioned above. Just as consistent with the observed facts is the idea that the brain's function is that of an intermediary between mind and body – or in other words, that the brain's function is that of a two-way receiver-transmitter – sometimes from body to mind, and sometimes from mind to body.

The idea that the brain functions as an intermediary between mind and body is an ancient one. But it has been discussed and endorsed by modern thinkers such as Henri Bergson, William James, and Ferdinand Schiller. The form of interactive dualism implied by this relationship has also been endorsed by several modern philosophers including Curt Ducasse and Neal Grossman, and by several prominent brain scientists, including renowned brain surgeon Wilder Penfield and Nobel Laureate Sir John Eccles. In addition, as I show in my book, many physicists now believe modern physics also supports a dualistic model of mind-brain interaction.

In fact, the transmission hypothesis can explain everything the production hypothesis explains – such as the effect of drugs and brain injury on the mind. For any change in brain functioning, such as that resulting from intoxication or a stroke, should be expected to affect its capacity as a receiver-transmitter just as certainly as its capacity as a producer. However, the transmission theory can also explain many phenomena that are simply inexplicable under the hypothesis of production.

The most dramatic of these phenomena examined in *Science and the Near-Death Experience* is the Near Death Experience (NDE), in which people near death sometimes report leaving their bodies, observing the surrounding scene in detail, traveling through a tunnel, and sometimes meeting deceased friends and relatives, or a mysterious “being of light.” In many of these cases people accurately described details of their surroundings, yet medical personnel present at the time later testified that the person was deeply unconscious, *with little if any brain activity possible*.

Many attempts have been made to explain these experiences within a materialist framework, and these were dealt with in the second book. In the interests of brevity, I will only deal here with the two most common materialist explanations: that the NDE is a hallucination caused by lack of oxygen in the dying brain; and that the NDE is caused by temporal lobe seizures.

Oxygen deprivation causes the NDE?

Dean Eddell, M.D., "America's Favorite Doctor," is well-known for his position on the phenomenon. During his radio show broadcast on January 20, 1999, he stated that, "Near-death experiences are the result of oxygen deprivation. Nothing more."

However, the effects of oxygen deprivation - called anoxia - are well known: mountain climbers frequently experience it, and it has been induced in laboratories. Pilots in training regularly undergo acute anoxia in flight simulators to make sure they can get their masks on in time. Those who fail do not have NDEs: they experience confusion and disorientation, sometimes trying to land their simulated planes on top of clouds before losing consciousness.

Also, we have the report of a man who has experienced both anoxia and the classic Near Death Experience. While he was an RAF pilot, Allan Pring experienced anoxia at high altitude, and years later he had a NDE:

I found myself 'floating' along in a dark tunnel, peacefully and calmly but wide awake and aware. I know that the tunnel experience has been attributed to the brain being deprived of oxygen, but as an ex-pilot who has experienced lack of oxygen at altitude I can state that for me there was no similarity. On the contrary, the whole [NDE] experience from beginning to end was crystal clear and it has remained so for the past fifteen years.ⁱ

Temporal Lobe Seizures cause the NDE?

Seizures are caused by abnormal electrical discharges in the brain, and seizures in the temporal lobes of the brain may cause auditory and visual hallucinations, memory flash backs, feelings of *déjà vu*, and more rarely, feelings of being "out of the body." It is these seizures that are thought by some researchers to be a primary cause of the near-death experience. A shortage of oxygen supplied to the brain has been shown to increase the susceptibility of the brain to seizures, including seizures of the temporal lobes.

Similar research by other neurologists supports the conclusion that electrical stimulation of the temporal lobes results in rather mundane phenomena that bears little if any resemblance to that found in the NDE. In 1978 Halgren, Walter, Cherlow, and Crandal, at the Reed Neurological Research Center at the UCLA School of Medicine, carried out thousands of such experiments, and concluded:

Of 3495 stimulations of the medial temporal lobe of 36 psychomotor epileptics, 267 were accompanied by reports of mental phenomena, including hallucinations of complete scenes, *déjà vu*, anxiety, visceral sensations, amnesia, and unformed sensory experiences.... Our findings suggest that the mental phenomena evoked by medial temporal lobe stimulation are idiosyncratic and variable, and are related to the personality of the patient stimulated.ⁱⁱ

More recently, Michael Persinger, a psychologist at Laurentian University in Canada, has mimicked temporal lobe seizure phenomena by electromagnetic stimulation. He has his subjects sit in the dark (wearing goggles) in a special chamber. Wearing a special helmet, weak magnetic

fields are then applied across the temporal plane, and during a 20-30 minute exposure, the subject reports his or her experiences, which are recorded.

The most common reported experiences were feeling “dizzy or odd” and “tingling sensations”, although 55% did report feeling “as if somewhere else” and 39% reported feeling as if they left their bodies or were somehow “detached.” Other commonly reported experiences were “vibrations” and feelings of fear.

The most common experiences, dizziness and tingling, are not characteristic of near-death experiences. And “vibrations”, “fear or terror”, “odd tastes” and “odd smells” are also rarely (if ever) reported as part of the NDE. Furthermore, the subjects in his experiments are able to converse with the experimenter and report their experiences as they occur – in other words, they remain very much “in this world” and do not experience a sense of shifting to another reality.

In 2004 Persinger’s research was dealt a serious blow, when a Swedish team attempted to replicate his findings, using equipment borrowed from his lab. A team at Uppsala University in Sweden, headed by Pehr Granqvist, tested eighty-nine undergraduate students, some who were exposed to the magnetic field, and some who were not. The Swedish team also consulted Persinger’s collaborator Stanley Koren to ensure that conditions for replication were optimal.

Granqvist’s team found no effect from the magnetic fields whatsoever.ⁱⁱⁱ The only characteristic that predicted what the subjects reported was personality: subjects who were rated “highly suggestible” on the basis of a questionnaire reported strange experiences when they were wearing the helmet, *whether the current was on or off*. Granqvist and his team concluded that the well-established psychology of suggestion was the best explanation for Persinger’s results.^{iv}

Finally, how closely do *actual* seizures resemble the NDE? Dr. Ernst Rodin, Medical Director of the Epilepsy Center of Michigan, and Professor of Neurology at Wayne State University, clarified the issue in a paper titled “Comments on a Neurobiological Model of Near Death Experiences”, published in the Journal of Near-Death Studies in 1989:

The hallmarks and nuclear components of NDEs are a sensation of peace or even bliss, the knowledge of having died, and, as a result, being no longer limited to the physical body. In spite of having seen hundreds of patients with temporal lobe seizures during three decades of professional life, I have never come across that symptomatology as part of a seizure.^v

In contrast with the peace and joy found in most NDEs, seizures are accompanied by feelings of fear, loneliness, and sadness. And seizures and electrical stimulation of the cortex do not evoke images of communicating with deceased relatives in another world.

I examined all of the other attempts to explain away the NDE as the product of a malfunctioning brain, and ultimately *not one* stood up to critical scrutiny. The conclusion I finally arrived at was that the NDE is exactly what it appears to be: a genuine separation of mind from body during the early stages of biological death.

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ⁱ Fenwick & Fenwick, 1996, p. 309.

ⁱⁱ Halgren, 1978, *et al*, p. 110. Here are the descriptions of the hallucinations induced by electrical stimulation of the temporal lobes reported by a female patient that had suffered seizures since she was 12 years old.

“Three of her hallucinations seemed to her like television shows – a ‘soap opera’ and programmes regarding implants or astronauts. The astronaut program seemed ‘like a dream, a weird dream’. ... The remainder of her hallucinations she reported to be specific memories: a trip to Yosemite or to Reading; a scene in her home; lying on a couch watching football; a particular telephone conversation; a chocolate coke she drank once in a small town.” (p. 92)

ⁱⁱⁱ Granqvist wrote: “In spite of high power for detecting differences between groups at a small effect size level, there were no significant differences between experimental and control group participation on any of the dependent variables.” (Pehr Granqvist et al., “Sensed presence and mystical experiences are predicted by suggestibility, not by the application of transcranial weak complex magnetic fields,” *Neuroscience Letters*, doi:10.1016/j.nuelet.2004.10.057 (2004).

^{iv} Granqvist et al., 2004, p. 2.

^v Rodin, 1989, p. 256.