

## Perspectives and Hypotheses

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# What Happens with the Mind when the Brain Dies?

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### Abstract

A neuroscientist reflects on his near-death experience to ponder the nature of the human mind and the survival of consciousness after death. Ancient traditions, manifold personal experiences, nuanced philosophical views, and recent scientific evidence, all point to the brain as a filter (or receiver) of consciousness rather than its fanciful producer. No doubt, good-old-fashioned materialists — nowadays rebranded as physicalists, crypto-dualists, or illusionists wearing virtual reality goggles— insist that minds are “nothing but” what brains do. Nevertheless, a trans-materialist science can expand the scope and depth of the answers (and the questions) that really matter not only to science but also to human flourishing.

**Keywords:** consciousness studies, near-death experiences, current neuroscience, dogmatic skepticism, trans-materialist science

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Please think of water. Visualize it for a moment. I bet you conceived it as a liquid, neglecting nearly by default that it can also be found in gas and solid forms. Something similar happens with the human mind.

Our culture gives priority to the waking state. The only alternative to caffeinated alertness seems to be alcoholic drowsiness or drugged-induced sleep, often interpreted as a mere mechanism to restore our productive capacities. We oscillate between functionality and recovery throughout most of our lives.

However, there is more mind within us. The beam of light of consciousness, when striking our brain as a prism, can refract (not just reflect) itself in a range of colors that goes beyond the scrawny binary of on and off. I am referring to the so-called “altered” states of consciousness, or “anomalous” experiences (although qualifiers like this often fail to do justice to the nature of these phenomena and their relative frequency of occurrence amongst laypeople).

The list is longer than what one could a priori presume: lucid dreams, hypnosis, regressions, trance, meditative states, psychedelic experiences, spiritual awakenings, out-of-body experiences, etc. Amongst them, we also find near-death experiences.

You may have probably heard of them. Indeed, we do not talk much about them; and yet, when a person does, people confess “me too” (Woollacott & Lorimer 2022). I had one in March of 2021. As Bosch masterfully depicted more than half a millennium ago in *The ascent of the blessed* (a painting that is part of a four-panel polyptych entitled *Visions of the Hereafter*), I found myself in the fabled tunnel of light (Figure 1). Three loving figures were waiting for me. I knew who they were. I was not afraid, but I knew that if I continued, then there would be no return. It felt like I decided to postpone that journey. Calmed and aware, I came back. A few days later, the surgeon and her team did the rest, together with the prayers of my family and friends.

Scientific studies show that one out of five people resuscitated after cardiac arrest declares having lived a similar experience (van Lommel *et al.* 2001), including out-of-body experiences, life review, or interacting with deceased people. Maybe it is all just a hallucination caused by the lack of proper brain blood supply. Or maybe not. Why the rush to settle the question? If it was only a matter of physiological malfunction, why did not the rest of the patients have an experience at all? And, for those who have it, why is it so universally consistent despite different backgrounds, cultural and otherwise? Moreover, how could such an intense (and transformative) experience take place during clinical death, with a flat electroencephalogram? There is so much more to learn (Vicente *et al.* 2022).

Those thoughts are a function of brains, there is no doubt. There is no need for fancy neuroscientific experiments to prove the point: one simply needs to knock somebody out. The really interesting question is whether, as the psychologist William James posed, such a function is “productive” or “permissive” (James 1898), namely, whether the brain secretes mind as the liver secretes bile or, on the contrary, whether it filters it as a radio does when receiving electromagnetic waves. The brain-computer metaphor is exhausted and rather exhausting (Gomez-Marin 2022). A truly new science of consciousness should challenge the dominant vision of a universe made of dull matter, transmuting it into a vibrant materiality whose matrix hosts the ability to know thyself.

In the meantime, scientific skepticism and peremptory religion meet in “neuro-soteriology,” also known as “promisomics” (Gomez-Marin 2021): promises of salvation whereby, disbelieving in heaven, eternal life is assured by means of an upload to the cloud (billionaires first). Such is the nightmarish dream of techno-transhumanism, conceptually cheap but big-budgeted. Elevating us to demigods, we strip our humanity from us. The prophecy is about immortalizing our soul as an algorithm in silicon chips. Not today, always tomorrow...

One does not need to be technically dead to live a near-death experience. The medical literature is crowded with reports of similar phenomena in traffic accidents, cases of asphyxia, or postpartum shock, amongst others. Not only the reality of such experiences is undeniable, but also their impact is personally indelible and phenomenologically invaluable (Bitbol 2014).

Similar cases defying orthodox explanations are also often described in palliative care units, when contravened curing gives way to compassionate caring for those patients labelled as terminal. Recently coined “terminal lucidity” (Nahm *et al.* 2012), and traditionally known as “*mejoría de la muerte*” in Spanish-speaking countries, the unexpected and sudden return of mental clarity and memory right before death in patients suffering from pronounced cognitive disorders, puzzles families, doctors, and scientists.

We are not talking about mere anecdotes that can be casually dismissed. The plural of anecdote is data. Thousands of accounts by people from different backgrounds consistently point in the same direction, as health professionals also attest.

But there is more. Eastern traditions such as Buddhism offer thorough descriptions of what happens not only close to death, but also during dying, and even after (Dalai Lama 2002). Think of the *bardo*, an intermediate state between death and reincarnation, or of *tukdam*, a meditative state in which the corpse does not breathe but neither decomposes even for weeks, which is being studied in laboratories (Lott *et al.* 2021). One only needs to look at the *Tibetan Book of the Dead* to realize what an exquisite investigation of the mind can be carried out with one’s own mind. Western neuroscientists should take notice.

So, what happens to the mind when the brain dies? Nothing at all, for sure, dogmatic materialists would confidently claim. According to their doctrine (more philosophical than scientific, and too often professed with the zeal of a stubborn ideology), the mind is “nothing but” brain activity. A near-death experience must be the brain’s last goodbye. The afterlife can only occur in the heads of those who stay. A true skeptic, however, would confess that she or he does not know the answer. Doubt is very different from denial. Inquiry is the mirror image of neglect. Our obligation as researchers is to investigate what we do not understand, especially when it challenges our deepest beliefs. Let us thus not offer premeditated nor improvised explanations, neither deploy conversation stoppers embroidered via self-refuting prefixes in adjectives such as “para-normal”, “super-natural” or “pseudo-scientific”. This only reveals a mulish prejudice disguised as scientific rationality. Great taboos can become fertile fields of exploration.

Whether one believes in the “thereafter” or not, something important ends “hereafter” (Tolstoy 1981).



**Figure 1:** Sketch of my near-death experience scene. I was not in a horizontal tunnel but in a vertical dwell, looking upwards. Three known figures (none of which was a family member) offered to help me climb. Without words, I kindly refused. I was not afraid, but calmly aware

Most likely, the ego vanishes. In the meantime, our ancestors live in our memory. Nevertheless, does any aspect of human consciousness survive after permanent bodily death? The possibility of a “life after life” should not distract us from the existential question of the meaning of death. Our thanato-phobic culture strives for a kind of orphan wisdom that would allow us to look at death in the face, loving what will not live forever. As the author and activist Stephen Jenkinson says, the solution to broken-heartedness is not less heart (Jenkinson 2015). Mortality is a burden and a blessing (Jonas 1992). Life is a miracle. Death remains a mystery.

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