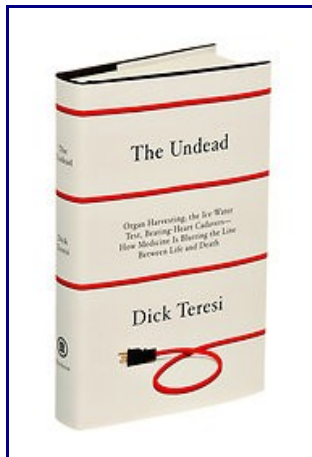


Seeing Bogeymen in the Fog Around Brain Death

By ABIGAIL ZUGER, M.D.

Like creatures battling undersea, pro-life and right-to-die forces are locked in mortal but only intermittently visible combat. The last prominent battle ended almost seven years ago, after the death of Terri Schiavo, the Florida woman with brain damage whose feeding tube was removed by court order in the spring of 2005. Since then, all has been quiet on the surface, belying the continuing turmoil in hospitals and courtrooms over what, exactly, marks the end of life.



Invariably, the louder the background tumult, the more useful is the quiet, dispassionate narrative. And so one turns to Dick Teresi's new book with considerable hope: Surely Mr. Teresi, a veteran science journalist, past editor in chief of *Science Digest* and *Omni*, will be the ideal guide through those dim purgatories where life and death can be difficult to distinguish.

All starts out promisingly enough. An indefatigable researcher and fluid writer, Mr. Teresi provides a good long riff on death past and present, from the Egyptian mummies, dehydrated into “the deadest people on the planet,” to the ever-hopeful terminally ill of our own age, still flossing their teeth and eating healthy meals in [hospice care](#).

Mr. Teresi points out that conclusive signs of death have always been subject to debate. All the great civilizations argued about them, with various expert commentators proposing various fail-safe criteria and yet (Mr. Teresi notes with some pleasure) specifying that they themselves should be left unburied for a few days just to avoid any unfortunate mistakes.

Enter the modern age. Life and death are medicalized. Most people still die the old way (heart stops beating, lungs quit breathing). But for an unlucky few, usually the victims of neurologic catastrophe, machines can now keep the heart and lungs going indefinitely. For them, “the bar for being dead has been lowered,” Mr. Teresi writes. “The bar for being alive has been raised.” For them, the medical community has turned to a more demanding standard: “Are you a person? Can you prove it?” The brain has muscled the heart and lungs off the stage.

And here our mild-mannered narrator suddenly begins to snarl. The reader — this reader, at least — could not be more startled were an actual guide to rip off a rubber face mask mid-tour and bare a werewolf's fangs. No more amusing anecdotes: Mr. Teresi morphs into a rabid right-to-lifer, deeply suspicious of brain death (“a lie”), neurologists (“not always the best scientists”), and organ transplants (“a \$20-billion-per-year business”).

An extraordinary several hundred pages ensue in which Mr. Teresi — motivated, he says, not by

religious convictions but pure scientific evidence — explains how medicine is defrauding, betraying and, yes, murdering an innocent public with the brain-death standard.

Mr. Teresi's major arguments will be familiar from previous debates.

First, he finds the basic standards themselves suspect, implying that the Harvard committee that outlined the first set in 1968 cared only for promoting the nascent field of organ transplantation. ("The committee members felt bad for the families of patients in severe [coma](#), and they proposed to make the families feel better by killing their loved ones.")

Second, he notes widespread confusion in hospitals' application of the Harvard criteria and subsequent revisions, charging that they are followed erratically by callous, sloppy medical teams.

Third, he says the criteria are not entirely reliable. Very rarely, an individual may emerge from what has been billed as irreversible coma. Far more common are the confusing movements and sounds made by permanently comatose patients; neurologists identify them as reflexes, but others interpret them as efforts to communicate.

Meanwhile, Mr. Teresi describes transplant surgeons hovering in hospitals like foxes in the henhouse, ready to snatch up any available organs, reinsert them elsewhere, and bill for the privilege.

In fact, he says, we now have a spectrum of deadness, from the Egyptian mummy at one end to the unconscious intensive-care patient with a valid donor card at the other, getting "the best medical treatment of his life" to preserve those valuable organs.

A point-by-point rebuttal to all this belongs in expert hands, but even the general reader will realize at some point that although Mr. Teresi repeatedly proffers his journalistic credentials as evidence of impartiality, he omits several pertinent perspectives. Among them are the advocates of those who suffer grievously from prolonged intensive care, and those who benefit from organ transplantation by actually receiving organs.

An I.C.U. death by slow degree, the patient unconscious, sustained by machines, drifting from infection to complication and back to infection, is a misery for all involved. So is death by failing heart, kidney, liver, you name it. Surely if a journalist is going to engage in the perilous game of quantifying suffering, he should include these pertinent viewpoints in the debate.

But there is no debate in this book. It is simply a long, one-sided screed.

Ultimately, you begin to feel for Mr. Teresi. Like many professional provocateurs, he is apparently just a frightened innocent at heart, asking that medicine justify its scientific pretensions with some comforting certainties. "As a writer who has covered science for four decades, this doesn't sound quite like science," he says about the times when neurologic criteria for death have proved fallible. "Physical laws don't usually have exceptions."

Alas, modern medicine left Newtonian certitude behind some time ago. Now, like particle physics, it has become far too subtle and complex to offer certainty — not in the realms of health and disease, where all outcomes are probabilities, and not in the realm of death.

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