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Do Einstein's Laws Endorse Ghosts?

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Einstein's conservation of energy law in physics states that energy is neither created nor destroyed but merely changes form or moves from one place to another. Where does the energy from our life forms go after we die?

—D. Oakes

A

In my years of investigating ghosts, I've occasionally encountered the idea that the laws of physics somehow support the idea of ghosts. From my basic knowledge of physics the claim seemed absurd, but I was shocked to see how widespread it is. An October 2011 Google search turned up nearly eight million hits suggesting a link between ghosts and Einstein's conservation of energy law.

Indeed, once I started looking for references to this peculiar little claim, I found them everywhere. Some version of this assertion is repeated on hundreds of ghost-hunting websites by top "experts" in the field (see, for example, Belanger 2003 and Greater Maryland Paranormal Society 2011).

One book, *Hoosier Hauntings*, offers the following theory of the origin of ghosts based on "known and proven chemical and electrical principles": "The physical act of living ... generates and radiates electrochemical, or, perhaps, electromagnetic radiation [that] is very strong and takes centuries to dissipate" (MacRorie 1997). Thus ghosts are said to be electrochemical or electromagnetic radiation remaining from the dead.

John Kachuba, in his book *Ghosthunters*, writes, "Einstein proved that all the energy of the universe is constant and that it can neither be created nor destroyed. . . . So what happens to that energy when we die? If it cannot be destroyed, it must then, according to Dr. Einstein, be transformed into another

form of energy. What is that new energy? . . . Could we call that new creation a ghost?" Kachuba goes on to confuse the physics-based energy that Einstein described with some sort of emotional or spiritual "energy" unknown to science: "What of the energy that composes our spirit, our spiritual essence? What happens to that?" (Kachuba 2007).

The website for a ghost-hunting group called Tri County Paranormal (members claim to "employ a completely scientific approach" to ghosts) asks, "When we are alive, we have electrical energy in our bodies.... What happens to the electricity that was in our body, causing our heart to beat and making our breathing possible? There is no easy answer to that" (Tri County Paranormal 2010).

In fact the answer is very simple: The human body's energy, after it dies, goes where all organisms' energy goes after death: into the environment. When we eat dead plants and animals, we are consuming their energy and converting it for our own use. Food is metabolized when digested, and then chemical reactions release the energy the animal needs to live, move, reproduce, and so forth. That energy does not exist in the form of a glowing, ghostly ball of electromagnetic energy but instead in the form of heat and chemical energy.

When we die, the energy stored in our bodies is released in the form of heat and transferred into the animals that eat us (i.e., wild animals if we are left unburied or worms and bacteria if we are interred) and the plants that absorb us.

If we are cremated, the energy in our bodies is released in the form of heat and light. The fuel you use to fill your gas tank is made from the stored energy of plant and animal matter that died many millennia ago; the energy moved from one form to another without generating any intermediate paranormal or ghostly entities.

Humans and other organisms generate low-level electrical currents that stop being generated when the organism dies. Because the source of the energy stops, the electrical current stops—just as a light bulb turns off when you cut off its energy source.

This is a perfect example of why skeptical investigation and critical thinking are needed to examine the validity of your assumptions. The "energy" that any dead person leaves behind is not in a form that can be detected with the ever-popular ghost-hunting electromagnetic field detectors. Ghost hunters and supposed experts who repeat this claim reveal nothing about ghosts—but much about their ignorance of basic science. ■

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