

New research throws concept of brain death into doubt

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December 18, 2007

According to the research of Dr. Alan Shewmon, "brain death" may not fulfill the concept of death of the complete organism – the whole person- and throws into doubt the neurological criteria for death.

Dr. Alan Shewmon of the UCLA Medical Center [presented](#) to the President's Council on Bioethics recently the results of examinations on individuals medically diagnosed as brain dead. What he found is that the physiology of the body may not require the brain in order to maintain a self-functioning state of equilibrium. Autonomic integration, such as regulation of temperature, proportionate development, homeostasis of fluid balance, electrolytes, energy balance, teleological wound healing, cardiovascular regulation, reaction to environmental stressors in a coordinated manner and more, were all maintained without adjustment based on monitoring. Their bodies were able to autonomously make the necessary adjustments to retain homeostasis: a state of equilibrium. He "considers these to be holistic properties because they're not properties of any one organ or organ system, but they're properties of the organism as a whole." The biological (or medical) understanding of death can be conceived as the loss of the organism in its entirety: the loss of the somatic integrative unity of the being, an understanding commonly accepted in both scientific and philosophical communities. What we understand as "brain death" however, according to Shewmon's research, does not fulfill this concept of death of the complete organism – the whole person - and places in doubt the neurological criteria for death. Though *part* of the organism (the brain) is inactive or even "dead", considerations for the death of the organism as a single entity could be concluded prematurely prior to the actual disintegration of the entire organism. In simple terms, is there such a concept as a living corpse? His research implicitly suggests and scientifically supports the philosophical reasoning that brain death, extending even to higher neurological disintegration, does not equate to the death of the person or loss of personhood. Brain death, a term not favored by Shewmon, can be more accurately defined as stated: the destruction or disintegration of the brain organ, not always to be equated with the death of the person. This contribution is crucial to the debate over the harvesting of organs from "brain dead" patients who are extraordinarily kept alive. In order to harvest a vital organ such as the heart, the human organism must be "kept alive" for the heart to be transferred successfully and free of atrophy. The ethical problem of this practice is that it denies natural death of the person. Death can be more fully ascertained as corresponding to the removal of the organ and not the actual pathology from which the individual suffers, such as brain disintegration or damage. The cause of death, which should accurately be stated in the coroner's report, is the surgical removal of a vital organ and not the pathology or injury subjecting the individual to a team of medics. The current medical rationale for brain death regards the death of the person as sharing in the punctual moment of full and irreversible brain destruction, regardless of any



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remaining autonomic function of the person. By using extraordinary methods to keep the organism (the person) alive, natural death is not only prolonged it is actually denied for an alternative cause and utility. What most efficiently causes death in these cases, then, is not the loss of the brain, but the alternative acts of medical practice. Without the full cessation of the entire organism, regardless of loss or destruction of material apt (the brain) for rational expression and *operational* coordination, the human organism can not be considered as dead. We find the basis for the understanding of this reality in Aristotle's principle of non-contradiction which states that something cannot be and not be at the same time. Shewmon's research supports this principle: a person (organism) cannot be living and at the same time be dead. The subjects (individuals) of his research were in fact living human organisms (people) whose brains were verifiably "dead" though who maintained holistic coordination and development. The question this research raises is in regards to the understanding of the brain and its material role in relation to the organizing principle of the whole: what maintains the unity of the human organism, the material (brain organ) or non material? What Shewmon considers brain death is consequentially identical to the loss of consciousness of the organism such as with severe high spinal cord injury. "So based on this, we have to conclude that if brain death is death on the basis of loss of the organism as a whole, then so does high spinal cord transection equal death of the organism as a whole. Now, the difference is — and the only difference is — there is preservation of consciousness in the high spinal cord injury. So if we maintain the standard rationale for brain death, we would have to say that the spinal cord injury victim is a consciousness in a nonorganism, which doesn't make a whole lot of sense. And if brain death is death on [that] basis..., then so are all other forms of permanent unconsciousness if we want to be logically consistent." The cases of individuals living and growing autonomously strongly deny brain death as criteria for death of the organism as a whole (the person). "Contrary to popular belief, brain death is not a settled issue. I've been doing informal Socratic probing of colleagues over the years, and it's very rare that I come across a colleague, including among neurologists, who can give me a coherent reason why brain destruction or total brain nonfunction is death." What we may conclude from his research is that it may be premature to posit the brain as the organ which maintains the unity of the human organism but rather to consider it the material median apt to express more fully the person. In most cases, individuals who suffer brain death do indeed experience a general shutting down of the crucial bodily functioning and die naturally. However, the individuals Shewmon examined are several rare cases of young persons who have been kept alive by extraordinary medical means for a time long enough to allow the organism (the human individual) to regain autonomic unity of function - long enough for the organism to compensate for the loss of one of its parts. Though some of the cases he studied should rightly have been allowed to die naturally, they nonetheless offer great insight towards understanding what serves as the unifying principle of personal being – most specifically, whether the unifying principle is subject to the organ known to express rational abilities.

Shewmon's contribution to the debate over brain death, as criteria for death of the person, is much more than a provision for the denial of organ transplantation prior to complete organismic cessation-the natural death of the person. An interesting



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parallel can also be drawn from his research on grown individuals with individuals in the beginning stage of human life – the embryo. The cases Shewmon examined involved persons who had suffered a *disintegration* of the brain organ. With the embryo, though fully integrated, the brain organ has *not yet developed* though vitally the organism as a whole is coordinated in its development. If we look at personhood in relation to unconsciousness or lack of material apt for rational expression (presence of a brain), we are able to support the dignity of the person at all stages of development, regardless of the absence of *part* of the organism, including any material or potential manifestations of the parts. The unity of the human organism is not to be reduced to merely the material. Truth, regarding the human person, is consistent, unified, and always beautiful.



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