Where’s Waldo? The ‘Decapitation Gambit’ and the Definition of Death

John P. Lizza, Ph.D.
Department of Philosophy
Kutztown University of Pennsylvania
Kutztown, PA 19530
USA
Tel: 610-683-4230
Fax: 610-683-4738
lizza@kutztown.edu

Key Words: death, decapitation, brain death, defining death, end of life

Word Count: 3,988
Abstract

Where’s Waldo? The ‘Decapitation Gambit’ and the Definition of Death

John P. Lizza, Ph.D.

The “decapitation gambit” holds that if physical decapitation normally entails the death of the human being, then physiological decapitation, evident in cases of total brain failure, entails the death of the human being. This argument has been challenged by Franklin Miller and Robert Truog, who argue that physical decapitation does not necessarily entail the death of human beings and that therefore, by analogy, artificially sustained human bodies with total brain failure are living human beings. They thus challenge the current neurological criterion for determining death and argue for a return to the traditional criterion of the irreversible loss of circulation and respiration. In this paper, I defend the “decapitation gambit” and total brain failure as a criterion for determining death against Miller and Truog’s criticism. I argue that Miller and Truog’s error lies in assuming that defining death is a strictly biological matter and that this assumption ignores the ethical and cultural context and purposes for why we seek to define death in the first place.
In “Decapitation and the Definition of Death,” Franklin Miller and Robert Truog reject an argument, what they dub “the decapitation gambit,” for accepting total brain failure as a neurological criterion for determining death [1]. The “decapitation gambit” holds that to reject the neurological criterion and return to only the traditional criterion of the cessation of circulation and respiration would entail the absurd implication that artificially, sustained decapitated human bodies are living human beings [2-4]. This conclusion is entailed because of the similarity in the role that the brain plays or would play in the organic integration of artificially sustained human bodies with total brain failure and artificially sustained decapitated human bodies, namely, no role at all. The “decapitation gambit” maintains that if physical decapitation normally entails the death of the human being, then physiological decapitation, evident in cases of total brain failure, entails the death of the human being. In this paper, I defend the “decapitation gambit” against Miller and Truog’s criticism.

Initially, it may be helpful to identify some points of agreement and disagreement between my view and that of Miller and Truog. First, we both accept that D. Alan Shewmon and others have demonstrated that artificially sustained individuals with total brain failure and, by analogy, artificially sustained decapitated human bodies may be organically integrated and would not be mere collections of organic parts [5, 6]. This shows that if human death is defined as the irreversible cessation of the integration of the organism as a whole, then either the neurological criterion for determining death must be rejected or one of two things must be done: (1) redefine what it means for an organism to be integrated as a whole consistent with the neurological criteria or (2) accept some alternative definition of death consistent with the neurological criterion. The 2008 President’s Council on Bioethics opts for the first alternative by proposing that even if artificially sustained human bodies with total brain failure are not just collections of
organic parts, they have lost their capacity to do “the fundamental vital work of the living organism – the work of self-preservation, achieved through the organism’s need-driven commerce with the surrounding world” and therefore are no longer integrated organisms as a whole [7]. Since I also agree with Shewmon’s criticism of the strategy of the President’s Council [8], I opt for (2). The “decapitation gambit” is offered as a strong reason for the adopting this alternative.

Second, Miller and Truog correctly interpret my argument as a reductio ad absurdum of their arguments for accepting only the traditional criterion of irreversible loss of circulation and respiration for determining death. They “bite the bullet” by accepting the conclusion of the reductio and defend the claim that an artificially sustained decapitated human being is not “dead” and therefore ought to be counted among the living “we.” However, Miller and Truog’s defense of this claim misses the ontological issue at stake and fails to do justice to the social, ethical, and political dimensions that bear on how death is defined.

In their critique of the “decapitation gambit,” Miller and Truog [1] present the following two formal reconstructions of the argument:

**Argument One**

1. Decapitation is an infallible sign and sufficient condition for death.
2. It is possible for a decapitated animal to maintain circulatory and respiratory functioning, either spontaneously for a short period of time or with mechanical assistance.
3. The circulatory-respiratory standard for determining death identifies the presence or irreversible absence of circulation and respiration as determining life and death.

4. It follows that the circulatory and respiratory standard must be false as a necessary and sufficient condition for determining death, because premises 1 and 2 entail that an animal dead by virtue of decapitation can maintain circulation and respiration.

**Argument Two**

1. “Brain death” constitutes physiological decapitation.
2. Decapitation is an infallible sign and sufficient condition of death.
3. Hence, individuals diagnosed as “brain dead” are necessarily dead.

Miller and Truog point out that common to both of these arguments is the premise that “Decapitation is an infallible sign and sufficient condition for death.” They then go on to challenge this premise by dismissing the following five reasons that they think might be given in support of it: “First, that it is self-evident. Second, everyone agrees that a decapitated animal is dead. Third, it has been universally adopted by authoritative commentators within Orthodox Judaism as an infallible sign of death. Fourth, in view of the role of the brain in integrating the functioning of the organism as a whole, a decapitated animal without a brain is necessarily dead. Finally, the permanent absence of consciousness signifies the death of the human being, and a decapitated human body lacks the organ responsible for consciousness [1].”
A critical problem in Miller and Truog’s reconstruction of the “decapitation gambit” is that the argument does not assume that “Decapitation is an infallible and sufficient condition for death.” In my presentation of the argument at the American Philosophical Meeting in Vancouver on April 10, 2009 [4], I offered for consideration experiments by Dr. White [9] in which the heads of monkeys were severed and transplanted to the bodies of other artificially sustained, decapitated monkeys. In those gruesome experiments, the monkeys appeared to exhibit consciousness following the transplantation. While Shewmon has correctly cautioned that it is difficult to say what forms of consciousness those monkeys may have had, he is willing to assume at least for the sake of argument that the monkeys were conscious following the transplantation [10]. I then endorsed the suggestion of Bernard Gert, Charles Culver, and K. Danner Clouser that it would not make sense to say that the monkeys whose heads were transplanted “died,” because “the importance of consciousness to a conscious organism has no counterpart in nonconscious animals or plants [11].” Gert, Culver, and Clouser take the presence of consciousness in the head as evidence that a death has not occurred, and now include a clause about the absence of consciousness in their definition of death. In their view, it would radically alter the ordinary meaning of death to consider the monkeys in White’s experiments to have died. Gert, Culver, and Clouser hold that, if a human being underwent such a head transplant, the artificially supported head which manifests consciousness would count as the continuation of the living “person,” and they ask for a new term to describe the headless body that might be artificially sustained, since in their view it is clearly not a human being. In earlier work, I have suggested that we use the term ‘humanoid’ for the artificially sustained headless body, as well as the artificially sustained whole-brain dead [12].
Gert, Culver, and Clouser’s interpretation of this actual experiment is reinforced by consideration of a permutation of the hypothetical case involving a human being. Suppose a certain human being, Waldo, underwent White’s operation, but that his decapitated body was also artificially sustained. Where’s Waldo? Following Gert, Culver and Clouser, Waldo would be identified with the transplanted conscious head, not his former decapitated, artificially sustained, integrated body as Miller and Truog’s view entails. Moreover, Waldo’s death occurs only when the psychophysical integration present in the sustained head irreversibly ceases. If his former artificially sustained, headless, integrated organism lost its organic integration, this would not mean Waldo’s death. Thus, in such circumstances, decapitation is not an “infallible sign and sufficient condition for death.”

Stephen Holland (personal correspondence, 2011) has suggested that Miller and Truog could respond to the Waldo thought experiment by identifying Waldo with the artificially sustained decapitated head and holding that Waldo has simply acquired a substantially altered circulatory-respiratory system, similar to someone surviving a heart transplant but only more extensive. However, they would then need to give an explanation of why the continuation of Waldo’s integrated headless organism is not the continuation of Waldo’s life. Since Miller and Truog hold that the continuation of Waldo’s artificially sustained integrated organism would be sufficient for the continuation of Waldo’s life despite Waldo’s loss of all brain functions, the continuation of Waldo’s artificially sustained headless organism in the hypothetical case would have to be sufficient for identifying Waldo with that live decapitated human organism. Since Waldo cannot be in two places at once, if Miller and Truog were to identify Waldo with the conscious head sustained by the new body, they would have to give up the idea that the continuation of Waldo’s integrated human organism despite the loss of all brain functions or
decapitation is sufficient for the continuation of Waldo’s life. However, this would require giving up the idea that nothing more than the continuation of organic integration is necessary for the continuation of a human life. Moreover, if it is the continuation of Waldo’s consciousness sustained by an extensively rehabilitated body that makes Waldo’s life continuous with the individual that has Waldo’s head rather than the continuously integrated human organism that formally sustained his consciousness, then the continuation of Waldo’s life requires more than simply the continuation of organic integration. This something more is the persistence of consciousness. However, if consciousness is necessary for the continuation of Waldo’s life, then its irreversible loss of would be sufficient for Waldo’s death.

Holland also suggests that the significance of consciousness in our lives can be reinforced by consideration of another version of the Waldo thought-experiment. Suppose that Waldo’s decapitated head and consciousness were not sustained by another human body with an organically integrated circulatory and respiratory system, as in White’s experiment with monkeys, but by an entirely mechanical system. Further, suppose that Waldo’s decapitated body is destroyed. In this case, Miller and Truog could not identify Waldo with the artificially sustained head and maintain that Waldo has continued to exist as an integrated human organism as a whole. They could not say that Waldo had simply acquired a substantially altered circulatory-respiratory system, again similar to someone surviving a heart transplant but only more extensive. Since such a system would be entirely mechanical and not organic, Waldo could not be an integrated human organism as a whole in any sense. On Miller and Truog’s definition and criteria for death, Waldo would therefore be dead. However, since Waldo is still ex hypothesi conscious, this implication is highly counterintuitive.
The “decapitation gambit” is best understood formally as a reductio ad absurdum of the argument that as long as circulation and respiration continue in a living human organism, albeit artificially maintained, the individual has not died. I take Miller and Truog to accept the following about the death of Waldo:

1. Waldo’s death is the irreversible cessation of the integration of his organism as a whole.

2. Artificially sustained human organisms with total brain failure are integrated organisms as a whole.

3. Decapitation of the organism is equivalent to total brain failure in the organism in terms of the role that the brain plays in the integration of the human organism as a whole.

4. Artificially sustained, decapitated organisms are integrated organisms as a whole.

Therefore:

5. Waldo is alive as long as his decapitated organism as a whole remains integrated and is dead when his organism as a whole is no longer integrated.

Since (5) is absurd, as consideration of White’s experiments with monkeys helps show, one of the premises must be false. I suggest that premise (1) is false.

It should be noted that Miller and Truog challenge (3), but they do so in a way that is irrelevant to the decapitation gambit [1]. They point out that “most cases of ‘brain death’ do not involve ‘total brain failure.’” In particular, studies have shown that “most patients diagnosed as brain dead continue to manifest some brain functions, most commonly the regulated secretion of the hormone vasopressin …. (which) represents an integrative functioning of the organism as a
whole [1].” They conclude that “in most ‘brain dead’ patients, the entire brain has not ceased functioning, and therefore they are not physiologically decapitated [1].” However, whether there is brain functioning in these cases that contributes to organic integration is irrelevant, since in their view such functioning is not necessary for there to be organic integration. In their view, artificially sustained “brain dead” individuals with no residual brain functions are as alive as those artificially sustained ‘brain dead’ individuals with some residual brain functions, as both are organically integrated. Brain death and physical decapitation are therefore analogous in terms of whether the brain is necessary for organic integration. If the lack of all brain function does not entail death in an artificially sustained human organism, then the lack of all brain functions in an artificially sustained decapitated human organism does not entail death. As D. Alan Shewmon maintains, “actual BD (brain dead) bodies prove that the hypothetically maintained headless body would be a living organism [13].’

What Miller and Truog miss is how the decapitation gambit challenges their assumption that human death can be understood in strictly biological terms as “the cessation of the functioning of the organism as a whole.” The biological paradigm of death assumed in their view entails that Waldo’s life would continue in the artificially sustained decapitated body and not in the artificially sustained conscious head of Waldo. However, because this conclusion is absurd, the decapitation gambit is a strong reason for rejecting the biological paradigm of death that underlies their view.

The problem with the biological paradigm (why it is absurd) is that it does not fit with the interests and purposes we have in defining and determining death. Those interests and purposes involve understanding the human being as something more than a biological being. For example, since it would make much more sense in terms of moral and social purposes to treat the
artificially sustained, severed, conscious head of Waldo as Waldo rather than his artificially sustained decapitated body, we should give up the assumption that death must be understood in the strictly biological terms of the cessation of the organism as a whole.

However, we need not even consider the Waldo-type of case to appreciate how no purpose or interest in defining and determining death is satisfied by accepting the biological paradigm and treating an artificially sustained decapitated human body as a living human being. The whole enterprise of formulating a legal definition and criteria for determining death must be understood against a background of interests, purposes, and values. However, there is no social, ethical, political or cultural reason for counting artificially sustained, decapitated human bodies among the living “we.” It is not, as Miller and Truog suggest, that I think it is “self-evident” that an artificially sustained decapitated human body should not be counted among the living. Nor is it simply a matter of counting heads and observing that most people would not consider their lives to continue after decapitation. And while it is relevant to show how total brain failure coheres with understanding decapitation as death in Orthodox Judaism, this is but one reason that some may find it compelling to reject their view. The reason for accepting decapitation as death is that it coheres better with our moral, social, and political systems of thought, which provide the framework for why we are interested in defining death in the first place. Artificially sustained decapitated bodies and, by analogy, individuals with total brain failure do not fit into those systems of thought. No such purpose or interest is served by treating them as living human beings.

Miller and Truog are likely to object at this point and claim that what I have just said conflates the biological (factual?) issue of when someone is dead with the ethical issue of how someone should be treated. However, when we draw the line between which beings get counted
as living human beings and which do not (and defining death for human beings is such a line-
drawing), it would be a mistake to think that we can separate the factual from the ethical. Which
biological facts we deem relevant for defining and determining death has to be understood within
a framework of interests, purposes, and values. The line is informed by our ethical, social, and
political systems of thought as much as our biological and other scientific systems of thought.
As Karen Gervais [14] has pointed out, there is no value neutral way to answer the question. The
best we can hope for is to show how alternative definitions and criteria for death may be
consistent with other beliefs we have about human beings. The “decapitation gambit” shows
how rejecting neurological criteria for determining death is inconsistent with other beliefs and
values we have about human beings.

As I have stated elsewhere [4], when it comes to us, our nature is different from that of
other kinds of beings. While we do have a biological nature, that biological nature could be
sustained in unprecedented ways. As an artificially sustained severed head, it would be the
continuation of our consciousness as a kind of cyborg, rather than a natural human organism,
along with the fact that we would continue to recognize, relate to, and value the individual as the
same human being, that ground our belief that death has not occurred. Absent the identification
of this being as a locus of value in a network of conscious, social relations, there would be no
reason to consider the human being to still be alive. In this hypothetical case, the biological
considerations of the internal integration of an organism as a whole would play little, if any, role
in our understanding of what it means for us to continue to be alive. While the artificially
sustained severed head would retain some type of psycho-physical integration or integrity, it
would not be the type of natural psycho-physical integration or internal “integration of the
organism as a whole” found in ordinary forms of life. Thus, the death of the human being could
be understood as the loss of “psycho-physical integration,” but there would now be new ways in which the integration could be maintained. Accordingly, there would be new ways in which the psycho-physical integration could irreversibly cease. My claim is that total brain failure is an actual case in which our psycho-physical integration irreversibly ceases.

Gert, Culver, and Clouser object at this point that to accept the irreversible loss of psycho-physical integration as a criterion for death would be to radically change the ordinary meaning of death [11]. However, I believe the opposite. Because human death has always signified a transformation from our being a human being into the remains of one, to ignore how our psychological, moral, and cultural nature defines the kind of being that we are and to focus exclusively on our biological nature to define our coming into being and passing away distorts our nature and the ordinary meaning of human life and death. At bottom, to think defining death for human beings is a strictly biological matter commits the familiar error in bioethics of thinking that what is fundamentally a philosophical issue can be resolved by medicine or biology.

Technology has intervened in the natural life-history of human beings in unprecedented ways and presents us with the challenge of how we ought to project the terms “life” and “death.” Some of the assumptions about the meaning of death that may have governed our use of the term in the past may thus need to be given up in light of the new cases. It may be more important to preserve other assumptions about the psychological, moral, and cultural meaning of human life and death at the expense of giving up what may have been some of the biological assumptions about the meaning of these terms. What is clear, however, is that this issue of how we ought to project “life” and “death” to the new cases is not one that can be settled by consideration of the meaning of terms, as if meaning were something timelessly fixed. While words cannot mean just
anything, the debate about how to project the terms must be understood within a framework of interests, values, and history of use within which words have their meaning.

In his *Cruzan* dissent, Justice Stevens wrote: “for patients … who have no consciousness and no chance of recovery, there is a serious question as to whether the mere persistence of their bodies is ‘life’ as that word is commonly understood, or as it is used both in the Constitution and the Declaration of Independence [15].” Steven’s question is not framed in strictly biological terms. When we ask for a definition and criterion for death that can be used in practical cases, it is not in terms of human beings as strictly biological beings that we are interested in an answer to the question. We are interested in the life and death of human beings understood as psychological, moral, and cultural beings, as well as biological beings. Indeed, if we frame the question in strictly biological terms, we rule out the psychological, moral, and cultural dimensions of human beings from the start and thereby distort the purpose of why we seek to answer the question in the first place. Moreover, as I have argued above, pushing a strictly biological account of life and death leads to strongly counterintuitive results when it comes to what we say about various actual and hypothetical cases. Most of us would not wish to identify ourselves with artificially sustained, brainless or headless integrated organisms, even though the strictly biological account of life and death leads to that absurd conclusion. If we resist this conclusion, then we are resisting it because we think of our nature as something more than biological.

Acknowledgement: I would like to thank the editors of the *American Philosophical Association Newsletter for Philosophy and Medicine* for permission to reprint with minor changes several

REFERENCES


2 Lizza JP. And she’s not only merely dead, she’s most sincerely dead. *Hastings Cent Rep* 2009;39(5):5-6.


