

## THE PERSISTENT VEGETATIVE STATE AND THE WITHDRAWAL OF NUTRITION AND HYDRATION

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In recent discussions of euthanasia, coma, and the withdrawal of artificially supplied nutrition and fluids, considerable confusion exists where these topics intersect with the condition known as persistent vegetative state (PVS). For example the terms "PVS" and "coma" are sometimes erroneously used interchangeably, especially by the popular media.<sup>1</sup> Further, regarding the withdrawal of food and water from PVS individuals, some opponents of the practice wrongly allege the intention to kill (aiming at death) on the part of all who allow the practice.<sup>2</sup> Such withdrawal is sometimes incorrectly viewed as euthanasia and is grouped indiscriminately with the deliberate termination of the lives of conscious yet severely disabled persons.<sup>3</sup>

The case of Nancy Cruzan—the first "right to die" case to reach the United States Supreme Court—brought the matter of the PVS before the public and the evangelical world with a special urgency. The case of *Cruzan v. Director of Missouri Department of Health* was called a "moral watershed for our nation" and "the equivalent of *Roe v. Wade*."<sup>4</sup> On June 25, 1990, the Supreme Court ruled that family members can be prohibited from ending the lives of "persistently comatose" relatives who have not made their wishes known clearly and convincingly. The parents of 32-year-old Nancy Cruzan were thus barred from ordering the removal of tubes that provided her with food and water.

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<sup>1</sup> R. E. Cranford writes: "It makes no sense to talk about 'comfort measures' or 'pain and suffering' in patients in a persistent vegetative state. Physicians should bring to the attention of Congress the fact that the class of patients called 'chronically and irreversibly comatose' simply does not exist in any meaningful sense. The term 'irreversible coma' should be completely abandoned. Physicians should educate the public that the withdrawal of artificial feeding from patients in [PVS] does not lead to the horrible signs and symptoms attributed to this process by special interest groups; this is misleading rhetoric, not medical reality" ("The Persistent Vegetative State: The Medical Reality—Getting the Facts Straight," *Hastings Center Report* 18 [February/March 1988] 32).

<sup>2</sup> Failing to see the distinction between withdrawing artificial feeding and aiming at death is G. Meilaender, "On Removing Food and Water: Against the Stream," *Hastings Center Report* 14 (December 1984) 11-13.

<sup>3</sup> The fallacy of such equation with euthanasia is exposed in R. F. Weir, *Abating Treatment with Critically Ill Patients* (New York: Oxford University, 1989) 413-414.

<sup>4</sup> J. Jankowski, "Case May Create 'Right to Kill,'" *Twin Cities Christian* (November 16, 1989) 22A.

After a serious car accident, Cruzan's brain had received no oxygen for nearly fourteen minutes. At the time of the high court's decision she lay in a Missouri hospital bed, receiving fluid and nutrition through a small tube into her stomach. Expected to exist in this condition for another thirty to forty years with no hope of improvement, she was said to be in a persistent vegetative state.<sup>5</sup> The courts subsequently permitted the withdrawal of food and water after "clear and convincing" evidence was presented that Nancy Cruzan would not have wanted to continue in such a condition. On December 26, 1990, the life of Nancy Cruzan came to an end, twelve days after her feeding tube was removed at the request of her parents. "She remained peaceful throughout [the twelve days] and showed no sign of discomfort or distress in any way," according to her parents, Joe and Joyce Cruzan, who sat by their daughter's bedside while the end approached.<sup>6</sup>

Concerning the morality of withdrawing mechanical feeding in cases of PVS, two main positions have emerged, even within the evangelical Christian community. Typical of the one side is Joseph Foreman, a founder of the antiabortion group Operation Rescue. Foreman called Cruzan's death a tragedy. "I think in the next few years you will see an entire industry spring up around putting people to death whom family, friends and so forth have deemed to be no longer of use to anybody," he said. "There will be wings of hospitals devoted to putting people to death like this."<sup>7</sup> This side considers Nancy Cruzan's death a case of euthanasia and morally wrong.

Typical of the other side is Kenneth Schemmer, a surgeon in Orange County, California, and a member of First Evangelical Free Church of Fullerton. A physician for twenty-five years, Schemmer stated his opinion before the Supreme Court heard the case. He argued that the Court "should allow Nancy Cruzan's living corpse to die." In Schemmer's view "Nancy actually died on January 11, 1983, of anoxia" as the result of her car accident, which produced cardiorespiratory arrest. Because Nancy's cerebral cortex—the seat of consciousness, reasoning, value decisions, and everything else we associate with personality—was so severely damaged that it no longer functioned, only her living "animal" body remained. Her "mammalian body" should be allowed to die.<sup>8</sup>

<sup>5</sup> Chief Justice W. H. Rehnquist used the term "persistent vegetative state" to describe Cruzan in writing the majority opinion. While the Cruzan case is the first United States Supreme Court "right to die" case, there have been over fifty cases heard in the state courts since 1976. On October 11, 1986, the Supreme Judicial Court of Massachusetts voted 4–3 to allow the removal of P. Brophy's feeding tube. Twelve days later Brophy died, becoming the first American to die after court-authorized discontinuation of artificially-supplied fluid and nutrition to a "comatose" patient. J. J. Davis argues against this decision in "Brophy vs. New England Sinai Hospital," *Journal of Biblical Ethics in Medicine* 1 (July 1987) 53–56. Arguing in favor of the decision and against Davis in the same journal volume is F. E. Payne, Jr., "Counterpoint to Dr. Davis on the Brophy Case," pp. 57–60.

<sup>6</sup> "A Peaceful Death Ends Fight Over Nancy Cruzan," [Minneapolis] *Star Tribune* (December 27, 1990) 1A, 14A.

<sup>7</sup> Ibid. 14A. See also "Prolifers Say Cruzan Death a Signal of Things to Come," *Christianity Today* (February 11, 1991) 56.

<sup>8</sup> K. E. Schemmer, "Nancy Cruzan Is Already Dead," [Loma Linda University Ethics Center] *Update* 5 (December 1989) 4–5.

What is a proper Christian response to the issue of PVS? Specifically, should Christians ever request the withdrawal of fluid and nutrition from individuals in this condition? According to the American Medical Association there are an estimated 10,000 PVS patients in the United States. To disconnect food and water from those in PVS will almost certainly result in dehydration and starvation within seven to fourteen days. To continue to supply food and water will ensure the maintenance of bodily processes for a time, often for years (the longest PVS case on record is thirty-seven years), but will almost certainly not lead to improvement in the patient.<sup>9</sup>

Although much has been written on PVS,<sup>10</sup> there is little from a distinctively Christian viewpoint.<sup>11</sup> The purpose of this article is to clarify some of the key issues surrounding the PVS controversy by examining the ethical question: Is it ever morally permissible to disconnect artificially supplied food and water from the PVS individual? I will first define PVS. Then I will attempt to define death, to ascertain if PVS is "death" in any sense of the term. Next I will explore the issue of neocortical destruction, the condition of the PVS individual's brain, to determine if it is irreversible as some claim. Finally I will ask whether neocortical destruction may be equated with the death of the person and what response or responses may be morally acceptable in light of the findings obtained.

<sup>9</sup> The longest recorded PVS survivor was E. Esposito, who existed in this condition from 1941 to 1978 (D. Lamb, *Death, Brain Death and Ethics* [Albany: SUNY, 1985] 6).

<sup>10</sup> Four helpful articles, from very different perspectives, discussing the Cruzan case (before the announced decision) are in *Hastings Center Report* 20 (January/February 1990) 38–50. See also the five articles on PVS in *Hastings Center Report* 18 (February/March 1988) 26–47. On March 15, 1986, the American Medical Association's Council on Ethical and Judicial Affairs issued a statement declaring that life-prolonging medical treatment and artificially supplied respiration as well as nutrition and hydration may be withheld from a patient in an "irreversible coma," even if death is not imminent." For a helpful analysis see K. O'Rourke, "The A.M.A. Statement on Tube Feeding: An Ethical Analysis," *America* (November 22, 1986) 321–323, 331. On April 21, 1988, the Executive Board of the American Academy of Neurology issued their "Position of the American Academy of Neurology on Certain Aspects of the Care and Management of the Persistent Vegetative State Patient," *Neurology* 39 (January 1989) 125–126. Also see T. L. Munsat, W. H. Stuart and R. E. Cranford, "Guidelines on the Vegetative State: Commentary on the American Academy of Neurology Statement," *Neurology* 39 (January 1989) 123–124. The AAN statement, more detailed than that of the AMA, arrives at the same conclusion. Also in agreement on allowing withdrawal of nutrition and hydration are the report of the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, *Deciding to Forego Life-Sustaining Treatment: A Report on the Ethical, Medical, and Legal Issues in Treatment Decisions* (Washington: U.S. Government Printing Office, 1983), and the report of the Hastings Center, *Guidelines on the Termination of Life-Sustaining Treatment and the Care of the Dying* (Bloomington: Indiana University, 1987).

<sup>11</sup> As of May 3, 1990, the Christian Medical and Dental Society had the issue of the treatment of PVS patients under discussion. They have already formulated a statement on the withholding or withdrawing of nutrition and hydration in general (CMDS Ethics Commission, *Opinions on Ethical/Social Issues* [Richardson: CMDS, 1991] 26). D. L. Schiedermayer, chair of the Commission, summarizes the major arguments for and against withdrawal of tube-feeding in general and concludes with an urgent call for papers and correspondence on PVS and tube-feeding ("The Death Debate," *CMDS Journal* 22 [Spring 1991] 13–19). The theology committee of the National Association of Evangelicals is also working on the issue of PVS but as of late 1991 had not yet released a statement. In a recent volume J. P. Moreland and N. L. Geisler consider the foregoing of artificial feeding but do not specifically address the issue in relation to PVS (*The Life and Death Debate* [New York: Praeger, 1990] 78–80).

I. DEFINITION OF PERSISTENT VEGETATIVE STATE<sup>12</sup>

The persistent vegetative state may be defined loosely as a condition in which there is no awareness of the self or the surroundings though the patient appears at times to be awake. The condition results primarily from severe cerebral injury and is usually associated with but not limited to functionally complete destruction of the cerebral neocortex. The electroencephalogram (EEG) reading is either very depressed or flat. Under the microscope most patients' brains show extensive cortical destruction, but a small number may have more localized damage. Individuals in PVS are seldom on any life-sustaining equipment other than a feeding tube.<sup>13</sup> The brainstem—the center of vegetative functions (such as heart rate and rhythm, respiration, gastrointestinal activity)—is relatively intact. PVS individuals thus breathe spontaneously, their hearts beat regularly, and they show sleep-wake sequences. They may have a grasp reflex, may exhibit yawning or chewing movements, and may swallow spontaneously. When food and water are supplied the digestive system utilizes the nutrients, the intestines produce waste products, and the kidneys yield urine. Most patients are silent, but some groan at times. The heart, lungs and blood vessels continue to move air and blood. "Personality, memory, purposive action, social interaction, sentience, thought, and even emotional states are gone. Only vegetative functions and reflexes persist."<sup>14</sup> The American Academy of Neurology has concluded that PVS patients do not experience pain or suffering. Ronald Cranford, a leading authority on PVS, states that "from a neurologic standpoint, they simply do not experience pain, suffering, or cognition."<sup>15</sup>

PVS should be distinguished from three related neurologic conditions: brain death, the "locked-in" syndrome, and coma. With brain death (sometimes called whole brain death) the entire brain—including the brainstem—is irreversibly and completely destroyed. If brain death precedes injury to the rest of the body, all other organ systems fail within

<sup>12</sup> Because there continues to be controversy about the clinical diagnosis of PVS, some lack of precision must remain attached to the expression "persistent vegetative state" (see D. N. Walton, *Ethics of Withdrawal of Life-Support Systems* [New York: Praeger, 1987] 51–53; Weir, *Abating Treatment* 404–405). Information for this definition and description of the PVS is taken from President's Commission, *Deciding to Forego* 174–175; American Academy of Neurology, "Position"; Walton, *Ethics of Withdrawal* 51–53, 79–80; Cranford, "Persistent Vegetative State" 27–32; Lamb, *Death, Brain Death* 5–6; Schiedermayer, "Death Debate" 15–16; P. A. Emmett, "A Biblico-Ethical Response to the Question of Withdrawing Fluid and Nutrition from Individuals in the Persistent Vegetative State" (master's thesis; Bethel Theological Seminary, 1989) 4–5, 248–249.

<sup>13</sup> This is most commonly a small plastic "G-tube" into the stomach. Within the last few years a new technology known as hyperalimentation has become available. By this means complete nutrition can be maintained intravenously (Payne, "Counterpoint" 56). See Emmett, "Biblico-Ethical Response" 220–228, for a useful discussion of five methods of mechanical hydration and nutrition.

<sup>14</sup> President's Commission, *Deciding to Forego* 174–175.

<sup>15</sup> R. E. Cranford, "Patients with Permanent Loss of Consciousness," *By No Extraordinary Means* (ed. J. Lynn; Bloomington: Indiana University, 1986) 187.

days. It is not possible to keep the body alive indefinitely with machines in cases of brain death.<sup>16</sup> Harvard Medical School criteria for diagnosing brain death include unresponsiveness, absence of spontaneous respiration, and loss of brainstem reflex activity.<sup>17</sup> In 1981 the President's Commission report proposed an updated version of the Harvard criteria.<sup>18</sup> While there have been some criticisms of these, the modified Harvard criteria are the ones most widely accepted for determining brain death.<sup>19</sup>

With the "locked-in" syndrome, or midbrain death, there is paralysis of all extremities and inability to communicate orally. The patient is unable to move the eyes horizontally but can move them vertically. Such patients are fully conscious and can communicate by blinking or moving the eyes up and down. This is, fortunately, an extremely rare condition.<sup>20</sup>

Coma is an "abnormality of brain function characterized by an unconscious sleep-like state with the eyes closed." While several kinds of coma have a high mortality rate, coma is a potentially reversible condition. After the initial injury, usually within days to several weeks, comatose patients who do not recover or die emerge from their coma to periods of apparent wakefulness. While some of these patients show variable degrees of neurologic recovery, the prognosis for those who remain in the vegetative state for one to three months becomes increasingly dismal. At this point, after detailed and repeated examinations by a trained neurologist, the diagnosis of PVS is usually made. Many physicians prefer to wait as much as six months before labeling a case as PVS.<sup>21</sup> Unfortunately, as indicated above, the terms "PVS" and "coma" have been used somewhat loosely, so that comatose patients may be inaccurately referred to as PVS and vice versa. It is important, therefore, that a careful diagnosis be made before designating an individual as PVS.

## II. DEFINING DEATH

We must next attempt to define death. This is essential because much of the argument over the withdrawal of artificial feeding revolves around the question of whether PVS patients are alive or dead. As noted, Schemmer

<sup>16</sup> Lamb, *Death, Brain Death* 37.

<sup>17</sup> Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, "A Definition of Irreversible Coma," *Journal of the American Medical Association* 205 (August 1968) 337-340.

<sup>18</sup> President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, *Defining Death: A Report on the Medical, Legal and Ethical Issues in the Determination of Death* (Washington: U.S. Government Printing Office, 1981) 159-166.

<sup>19</sup> J. J. Paris and R. E. Cranford, "Definition of Brain Death," *TToday* 40 (April 1983) 5-14; R. M. Gula, *What Are They Saying About Euthanasia?* (New York: Paulist, 1986) 14-18; Emmett, "Biblico-Ethical Response" 94-96; D. N. Walton, *Brain Death: Ethical Considerations* (West Lafayette: Purdue University, 1980) 21-29.

<sup>20</sup> J. Bounds, "The Persistent Vegetative State," *Update* 5 (December 1989) 3; K. E. Schemmer, *Between Life and Death: The Life Support Dilemma* (Wheaton: Victor, 1988) 51.

<sup>21</sup> Bounds, "Persistent Vegetative State" 3; "Position of the American Academy of Neurology" 125-126.

holds that Nancy Cruzan actually died in 1983. Others, such as Gloria Miller, past president of the Right to Life League of Southern California, argue that Cruzan was alive—not brain dead, terminally ill, or dying. According to Miller, nurses who gave Cruzan daily care say she interacted with her environment and caregivers.<sup>22</sup> Setting aside the specific case of Nancy Cruzan (because of conflicting testimony about her condition), in what sense can it be said, as some do, that PVS individuals, correctly diagnosed as such, are dead? How do we know when death has come? If we can determine that the PVS individual is dead, then we need not hesitate to withdraw food and water. If on the other hand the patient is alive, we must not take his or her life.

Robert Veatch, director of the Kennedy Institute of Ethics at Georgetown University, has been highly influential in recent discussions of the definition and determination of death. Veatch observes that there is

widespread agreement that two separate issues are really at stake in the debate over the determination of death. The first question is essentially philosophical, conceptual, and ethical: Under what circumstances do we consider a person dead? The question is asked in several ways. What are the necessary and sufficient conditions for a person to be alive? What is the essential characteristic of persons such that its loss can be said to constitute death? . . . Once a concept of death has been chosen, one can turn to a second, more scientific question: How, empirically, does one measure the irreversible loss of whatever functions have been determined to be essential for life?<sup>23</sup>

Veatch suggests four categories for defining death, based upon four different concepts of death.<sup>24</sup> Consideration of these categories here will be helpful in providing a basic framework for our thinking about death. The issues raised are central to the ethical question before us. For each category I will summarize Veatch's explanation and then comment briefly on the adequacy of the underlying concept for providing empirical criteria for diagnosing death, since it is the measuring or diagnosing of death that concerns us tangibly in answering the ethical question of withdrawal.<sup>25</sup>

1. *Failure of heart and lungs.* Veatch begins with the traditional understanding of the locus of death, focusing upon the heart and lungs. In

<sup>22</sup> G. A. Miller, "Nancy Cruzan Is Not a Vegetable," *Update* 5 (December 1985) 5. See also R. L. Marker, "Euthanasia, the Ultimate Abandonment," *Ethics and Medicine* 6 (Summer 1990) 24, for a summary of the court records on the Cruzan case, revealing some disturbing statements about her condition (Cruzan supposedly can hear, can see, smiles at amusing stories, cries at times when visitors leave, sometimes seems to try to form words, experiences pain from menstrual cramps, will die in pain if she is starved and dehydrated to death). Perhaps because of these statements (whether they are facts or judgments is of course highly debatable), as well as the testimony of two physicians that Cruzan is not in PVS, the Supreme Court members voted as they did. Concerning vegetative patients who exhibit organized motion as a reaction to different stimuli see Schemmer, *Between Life and Death* 56, 58–59 n. 7.

<sup>23</sup> R. M. Veatch, "Death, Determination of," *The Westminster Dictionary of Christian Ethics* (ed. J. F. Childress and J. Macquarrie; Philadelphia: Westminster, 1986) 144–145. See also Veatch, *Death, Dying, and the Biological Revolution* (New Haven: Yale University, 1976) 24–25.

<sup>24</sup> Veatch, *Death, Dying* 25–54.

<sup>25</sup> Gula, *Euthanasia* 11.

this view the concept of death (and the presence of life) centers on the flow of vital body fluids—blood and breath. When these have irreversibly stopped flowing, death has occurred. The empirical criteria of death are easily observed, and even today most individuals are declared dead when circulation and respiration have permanently ceased. Before the development of the respirator and other life-extending medical technologies, the failure of heart and lungs was considered both a necessary and sufficient condition for diagnosing death. Because of these modern devices, however, we now sometimes have to ask: Who or what is responsible for the vital signs—the individual, or the respirator? Or is it the cardiac pacemaker? Heart and lung failure is no longer a sufficient condition in every case for saying that a human life has ended. Whether or not it is a necessary condition depends upon one's view of neocortical destruction, to be addressed below. This category, then, is no longer as decisive as it has been traditionally for diagnosing death.

2. *Separation of body and soul.* Aristotle and the Greeks thought of the soul as the animating principle of life. The soul or form animates the body or matter, and when these two elements are separated, death occurs. While this concept of death approximates the language of the Bible, and while most Christians accept that when the soul or spirit departs permanently from the body death occurs, the major problem with this view is how to determine when the soul is gone. Cessation of the flow of bodily fluids may accompany the departure of the soul, but the two events are not to be equated. With this concept of death the Christian must still ask: How can I know when the soul has departed? While the permanent separation of body and soul is in the view of most Christians necessary for the ending of human life on earth, the question of sufficiency hinges on one's view of PVS. The concept of body-soul separation is a theological understanding of death but not a scientific one.<sup>26</sup>

3. *Brain death.*<sup>27</sup> This category, as well as the next, emerged in response to the difficulty of determining death when technical devices intervene in the natural processes of living and dying. The concept of death in this view is "the irreversible loss of the capacity for bodily integration and social interaction."<sup>28</sup> Because this twofold capacity is centered in the brain, it is there that the locus of death is to be found. Death is considered to have occurred when the entire brain has died. Because the criteria for diagnosing brain death are simple and observable, and because no one with brain death (as diagnosed according to the Harvard criteria) has ever survived, this understanding of death, for those who have suffered major

<sup>26</sup> Ibid. 11–13.

<sup>27</sup> Veatch argues: "Terms such as *brain death* or *heart death* should be avoided because they tend to obscure the fact that we are searching for the meaning of the death of the person as a whole" (*Death, Dying* 37 [italics his]). We will use the term "brain death" because of its widespread acceptance in the literature.

<sup>28</sup> Ibid. 53.

brain injury, is adequate, assuming that the concept of whole brain death is philosophically sound.<sup>29</sup> Yet because of the thousands of individuals with partial brain death—with the capacity for organ-system integration but without the capacity for social interaction—some are questioning whether the concept of whole brain destruction is not too narrow a criterion for declaring life to be over in every case of severe brain damage.<sup>30</sup> While few today would deny that this is a sufficient condition for declaring a person to be dead, the question of necessity is hotly debated and leads to our next category.

4. *Neocortical death.* Veatch's final category places the locus of death in the neocortex, the outer layer of the brain covering the cerebrum. This is sometimes called "cerebral death," "higher brain death," or the "apallic syndrome."<sup>31</sup> In this view, when neocortical functioning is irreversibly lost (as determined by a variety of criteria, including the EEG<sup>32</sup>) the person is dead, because the concept of death in this case is the "irreversible loss of consciousness or the capacity for social interaction" or both.<sup>33</sup> This is the condition of PVS individuals. According to definition three, these are not dead. Those who would say that such are dead focus on the neocortex because it appears to be the biological precondition for consciousness and self-awareness, the bases of personal life and social interaction. But because those in PVS are clearly not dead biologically, and because cases of recovery—though extremely rare—have been known for those who were thought to have lost neocortical function,<sup>34</sup> no national or state government nor any religious body has officially endorsed neocortical death as an acceptable understanding of death. While neocortical destruction is a necessary condition for diagnosing death, it is not considered sufficient by various official bodies.

After analyzing each of these four categories in terms of their concepts of death, Veatch concludes that "death is most appropriately thought of as the irreversible loss of the embodied capacity for social interaction,"<sup>35</sup> a capacity that is absent with brain death and neocortical death and, of course, with the permanent failure of heart and lungs.<sup>36</sup> Veatch, then, accepts not only brain

<sup>29</sup> The adequacy of the whole brain death concept is demonstrated in Lamb, *Death, Brain Death*. See also J. M. Frame, *Medical Ethics* (Phillipsburg: Presbyterian and Reformed, 1988) 58–62, 75–81.

<sup>30</sup> See e.g. J. B. Brierley, J. A. H. Adams, D. I. Graham and J. A. Simpson, "Neocortical Death after Cardiac Arrest," *Lancet* (September 11, 1971) 560–565.

<sup>31</sup> The term "apallic syndrome" refers to the loss of the pallium, the grey cortical mantle that covers the cerebral hemispheres. There is almost total destruction of the cerebral neurons, and the cortex is replaced by a "thin gliotic and fibrous tissue" in patients who remain in this condition for several years (Walton, *Brain Death* 77).

<sup>32</sup> Veatch contends that the EEG alone may be sufficient empirical evidence of neocortical destruction (*Death, Dying* 42–51).

<sup>33</sup> *Ibid.* 41, 53.

<sup>34</sup> Emmett, "Biblico-Ethical Response" 104 n. 25; G. E. Pence, *Classic Cases in Medical Ethics* (New York: McGraw-Hill, 1990) 18–19.

<sup>35</sup> Veatch, *Death, Dying* 42.

<sup>36</sup> See Emmett, "Biblico-Ethical Response" 95–96.



death but also the irreversible loss of neocortical functioning as a satisfactory category for defining death. Schemmer agrees with this conclusion.<sup>37</sup>

How are we to regard the proposal of Veatch and others that neocortical destruction is an acceptable understanding of death? Those who maintain that the essential quality of life is the capacity for social interaction, so that when this is gone the individual is dead, are on shaky ground from a purely scientific standpoint. While there is at present no uniform definition of death and the diagnosis is still left to the judgment of the physician, the most widely accepted scientific definitions of death include the permanent loss of organ system integration as well as the permanent loss of consciousness and the capacity for social interaction. Charles Culver and Bernard Gert, for example, define death as the "permanent cessation of functioning of the organism as a whole."<sup>38</sup> And the President's Commission report states that "death is that moment at which the body's physiological system ceases to constitute an integrated whole."<sup>39</sup> Because the neocortical concept of death involves a major redefinition of death—something that the whole brain death concept does not do since it simply recognizes what always occurs at death—the scientific community has held back from accepting neocortical destruction as a sufficient definition of death.<sup>40</sup>

What should the Christian's response be to this prevailing scientific opinion? If we accept the view that the PVS patient cannot be regarded as dead, the matter would appear to be settled. Since we must do nothing to contribute knowingly to the death of an innocent person, the artificial feeding and hydration must continue. The Christian, however, is not limited to the prevailing scientific opinion in ethical decision-making. While we must not reject or ignore valid scientific findings, and while it would appear to be unwise at present to attempt to redefine death scientifically, we may—indeed, we must—consider revelation as well in formulating ethical judgments. Before turning to Biblical and theological arguments, however, one further question needs to be asked.

### III. NEOCORTICAL DEATH—IS IT IRREVERSIBLE?

Are PVS individuals permanently unconscious? If their condition is sometimes reversible, the decision to discontinue fluid and nutrition is a

<sup>37</sup> Schemmer, *Between Life and Death* 52–58.

<sup>38</sup> C. M. Culver and B. Gert, *Philosophy in Medicine* (New York: Oxford University, 1982) 181.

<sup>39</sup> President's Commission, *Defining Death* 33.

<sup>40</sup> Gula, *Euthanasia* 18–19; Emmett, "Biblico-Ethical Response" 97–99, 250–251. Lamb notes that "ultimately the concept of 'death' can only be applied to organisms not persons" (*Death, Brain Death* 93). Conceding this point, Walton argues that "aggressive therapy [by this he includes artificially supplied fluid and nutrition] may be discontinued in some circumstances even if the patient is not certifiably dead. This approach is already widely in place. It is ultimately based on the reasoning that the patient has the right to refuse treatment" (*Ethics of Withdrawal* 85).

much more difficult one to make. If their condition is genuinely irreversible, the moral obligation for continuing artificial feeding is harder to establish. Do we know for sure that PVS patients cannot recover? To answer this question Schemmer presents the recent findings of Fred Plum, a professor in the department of neurology at the New York Hospital—Cornell Medical Center, and his associates. Plum has been at the leading edge in this area of neurological research. He and Bryan Jennett were the first to describe the medical condition of PVS after brain damage.<sup>41</sup> Plum's latest findings<sup>42</sup> are highly significant.

Using positron emission tomographic (PET) measurements of regional cerebral blood flow and glucose metabolic rate, [researchers] discovered there is no metabolic overlap between vegetative patients and either normal or locked-in persons. They also found that even patients with marked cerebral atrophy could not be confused on the CT [computerized tomography] scan with those in the vegetative state (complete cortical death).<sup>43</sup>

What this means, according to Schemmer, is that for the first time since we began connecting people to machines that replace their vital organs we can now determine whether we are keeping a *person* alive or keeping a *body* functioning. He calls this a "welcome breakthrough" that "may provide us with our first truly ethical release from one aspect of the life-support dilemma."<sup>44</sup>

Schemmer is also enthusiastic about related developments. Although PET scans are done in relatively few centers across America and are moderately costly, a much more widely available and less costly procedure—the pulsed Doppler ultrasound (PDU) test—may be utilized. The primary contribution of Plum's work was to confirm the detectable distinctions between unconscious patients, locked-in patients, and patients with a dead cerebral cortex. Now that these distinctions have been proven to exist, the PDU test establishes that "when the characteristic brain death waveform is present, even though the brain stem may be functioning and sustaining heart and lung action, the cortex is reliably dead." The PDU measurement of the carotid artery blood flow is accurate by itself and can be done in any hospital in America. Schemmer calls this "a landmark discovery: the actual clinical point of death of the human being can now be identified technologically with certainty." In his view we no longer need to worry about pulling the plug too soon. "When a patient has all the clinical evidence of permanent loss of consciousness over a period of time, we can now obtain a PDU test and a confident determination of brain death." If there is still some question, PET studies of cerebral blood flow and glucose metabolism

<sup>41</sup> B. Jennett and F. Plum, "The Persistent Vegetative State: A Syndrome in Search of a Name," *Lancet* (April 1, 1972) 734–737.

<sup>42</sup> F. Plum *et al.*, "Differences in Cerebral Blood Flow and Glucose Utilization in Vegetative Versus Locked-in Patients," *Annals of Neurology* 22 (December 1987) 673–682.

<sup>43</sup> Schemmer, *Between Life and Death* 56. Schemmer is here summarizing the 1987 Plum article (see n. 42).

<sup>44</sup> *Ibid.*

give further confirmation of whether or not the patient's cortex is definitely dead.<sup>45</sup> Undoubtedly these data will be scrutinized and further research will be done to explore the ramifications of the findings for PVS cases. At the present time, however, there appear to be increasingly reliable scientific criteria for establishing the totality and permanence of neocortical destruction in PVS individuals.

#### IV. PERSONHOOD AND NEOCORTICAL DEATH

What Schemmer describes as a "breakthrough" is, of course, only of major ethical significance for those who accept neocortical destruction as the death of the person. As stated above, the PVS individual is not dead in the holistic physiological sense. Yet according to Schemmer's interpretation of these recent scientific findings the cerebral neocortex, in accurately diagnosed PVS cases, is completely and permanently ruined. Might it be possible to argue from a Christian perspective that even though the PVS body is still functioning, the person himself or herself is gone from the body? In other words, can we equate neocortical destruction with the ending of personal life even though the body is still breathing? This depends of course on how we understand the term "person." Although the Bible does not provide a definition of "person," Christian ethicists are more or less compelled to offer a definition because of the frequent use of the term in bioethics, sometimes in ways hostile to Christian positions.<sup>46</sup>

When we seek to understand personhood and humanness, the key Scriptural concept is undoubtedly the "image of God." The fact that human beings are made in (or as) the image of God is given as the reason they have rights of personhood. For example, the right to rule over creation (Gen 1:26-28), the right to life (9:5-6) and the right to be addressed with respect (Jas 3:9-10) are grounded in the concept of the image and likeness of God. What we speak of as "human rights" are rights of personhood, and these are based upon our creation in God's image. To be a human person is to be an imager of God.<sup>47</sup>

But this just pushes the issue back one question further: What is the image of God? The main schools of thought are well known. The most common view is that the image is an inherent characteristic or characteristics—physical, psychological, or spiritual—within human nature, such as reason,

<sup>45</sup> Ibid. 57-58. See also Emmett, "Biblico-Ethical Response" 248-251, on procedures to determine neocortical death. On the permanence of this condition Emmett writes: "The tissue of the central nervous system does not regenerate. If it is destroyed it will not repair itself as does other tissue. . . . Other parts may take over some of the function at the cerebral level and ischemic tissue which appears destroyed (as in a stroke) may recover function to some degree. However, there is no regeneration of cells. If destruction can be shown to have occurred, it is irreversible" (p. 103 n. 24).

<sup>46</sup> A significant but unsatisfactory attempt to define "person" is by M. Tooley, "Decisions to Terminate Life and the Concept of Person," *Ethical Issues Relating to Life and Death* (ed. J. Ladd; New York: Oxford University, 1979) 62-93.

<sup>47</sup> Frame, *Medical Ethics* 33-35.

self-consciousness, or self-determination. This position has been referred to as the substantive or structural view and is based in part upon the marked innate differences between animals and human beings (Gen 1:24–28).

The relational view sees the image not as a quality within human nature itself but as the experiencing of relationships, either between oneself and God or between human beings. The relationship itself is the image of God. Some supporters of this view point to Gen 1:26–27, where the male-female relationship is mentioned in close connection with creation in God's image, as if to mirror the internal communion within the Godhead.

A third position, the functional view, maintains that the image of God is something that human beings do, not something they possess or something they experience. The function most commonly suggested is rulership or dominion over creation, since this activity is tied so closely to the decision of God to create humans in his image (Gen 1:26) and is repeated just after their creation (1:27–28).

None of these views should be considered as totally without foundation, nor is it necessary to define the image in terms of only one of these views. A composite understanding of the image, incorporating each of the above positions, is not only possible but quite reasonable and harmonious with Scripture.<sup>48</sup>

The Scriptures give good reason to believe that the image concept has a great deal to do with our relationships, our exercise of dominion, and our mental and spiritual capacities. Rather than being a singular concept or certain specific qualities, however, the image of God might better be thought of as including all that we are and do as human beings, as embodied persons. We image God in our being and in our doing, although when we sin we disgrace the God whose image we are. We may argue, as D. J. A. Clines has done from the perspective of Semitic studies, that we are created not so much *in* the image of God but *as* the image of God, to be his representatives on earth.<sup>49</sup>

Whether believers or unbelievers, all human beings are created and exist throughout life as imagers of God (Gen 9:6; Jas 3:9), to represent the King as his vice-regents on earth. While some never fulfill this task as God intended, others grow steadily in their character and service for God (2 Cor 3:18; Col 3:10), just as Jesus—the supreme imager of God (2 Cor 4:4; Col 1:15)—developed in his total humanity (Luke 2:40, 52).

We can propose, then, that to be “in the image of God” means that we exist as the representatives of God on earth, with certain God-given and

<sup>48</sup> Composite understandings of the image (not necessarily identical to mine) are presented by A. A. Hoekema, *Created in God's Image* (Grand Rapids: Eerdmans, 1986) 66–73; G. Carey, *I Believe in Man* (Grand Rapids: Eerdmans, 1977) 30–40.

<sup>49</sup> D. J. A. Clines, “The Image of God in Man,” *TynBul* 19 (1968) 53–103. On this point see also J. K. Hoffmeier, “Abortion and the Old Testament Law,” *Abortion* (ed. Hoffmeier; Grand Rapids: Baker, 1987) 54–55; A. P. Ross, *Creation and Blessing* (Grand Rapids: Baker, 1988) 112–113. Also helpful on what it means to be imagers of God are H. Bouma III, D. Diekema, E. Langerak, T. Rottman, A. Verhey, *Christian Faith, Health, and Medical Practice* (Grand Rapids: Eerdmans, 1989) 27–34.

God-like qualities and capacities, so that we may experience vital relationships with God and others and so that we may exercise dominion over the earth. As we study the Scriptures on the image-of-God concept we find that to be the representatives of God on earth presupposes some capacity, either actual or at least potential, for self-awareness and self-direction, for relationships and for the exercise of authority over creation.

Given this understanding of the image concept, we may now attempt a definition of the term "person." A human person is a unique individual, made as God's image, known and cared for by God at every stage of life, with the actual ability or potential to be aware of oneself and to relate in some way to one's environment, to other human beings, and to God. The earthly life of a person thus begins at conception and ends when this ability or potential ceases.<sup>50</sup> According to this definition, then, the baby in the womb as well as the comatose patient is a person, whereas the PVS individual, as defined with the precision that now appears to be possible, is not. His or her potential for self-awareness, social interaction, and communication with God is irreversibly lost. This is not the case with handicapped fetuses or newborns, with Alzheimer's patients, or with the comatose. Some capacity and potential—however slight—for imaging God is present in these cases.<sup>51</sup> The absence of or damage to cerebral functioning is neither total nor necessarily irreversible. In true PVS cases, however, the neocortex is completely and permanently destroyed.

<sup>50</sup> In formulating this definition I have been helped by J. R. Nelson, *Human Life: A Biblical Perspective for Bioethics* (Philadelphia: Fortress, 1984); C. S. Evans, "Healing Old Wounds and Recovering Old Insights: Toward a Christian View of the Person for Today," *Christian Faith and Practice in the Modern World* (ed. M. A. Noll and D. F. Wells; Grand Rapids: Eerdmans, 1988) 68–86; J. Foster, "Personhood and the Ethics of Abortion," *Abortion and the Sanctity of Human Life* (ed. J. H. Channer; Exeter: Paternoster, 1985) 31–53; O. O'Donovan, "Again: Who Is a Person?," *Abortion* (ed. Channer) 125–137; C. E. Bajema, *Abortion and the Meaning of Personhood* (Grand Rapids: Baker, 1974) 15–41. See also J. J. Davis, *Evangelical Ethics* (Phillipsburg: Presbyterian and Reformed, 1985) 153–154; V. E. Anderson and B. R. Reichenbach, "Imaged Through the Lens Darkly: Human Personhood and the Sciences," *JETS* 33/2 (June 1990) 197–213.

<sup>51</sup> I do not speak of "potential persons," an expression that is frequently used by those with a permissive attitude toward abortion. I refer, rather, to persons with potential. No living entity is a potential person. As soon as human life begins in the womb the new individual is a person—a human being with God-given potential that will become more and more actual as the life progresses. The characteristics of personhood become more evident as time passes, but the individual is not lacking personhood until these characteristics appear. Those who oppose abortion, while affirming this understanding of the fetus, sometimes fail to note the fundamental difference between the potential/actual distinction at the beginning of life and at the ending of life. It is sometimes argued that since an individual is regarded as a human being from the very beginning of life, even though there is no actual cognition or self-awareness (only potential), then a PVS patient must be regarded similarly as a human person and thus be kept alive physically as long as possible. The overlooked factor is that in the fetus the child's capacities and potentialities for cognition and self-awareness are oriented in the direction of growth and fullness of life, whereas in PVS patients these potentialities and capacities are destroyed. While there is a lack of cognition and self-awareness in both the embryo and PVS patient, this fact alone does not provide a basis for identical treatment. In the one case the potential is present, and the movement is in the direction of the actual; in the other case the potential is permanently lost because the capacity itself is lost.

It appears, then, that neocortical destruction equals the end of personal life because the correctly diagnosed PVS individual is a body of organs and systems, artificially sustained, without the personal human spirit that once enabled this body-soul unity to represent God on earth.<sup>52</sup> Since the Bible on occasion uses the language of the human spirit's departure—as something different from the person's life-force or final breath—to signify death (Luke 23:46; Acts 7:59–60), we may use similar language in suggesting that the spirit of the PVS individual has already returned to God.<sup>53</sup> While the body still has some kind of residual life, the person is dead. Speaking theologically, the individual's personal earthly existence as the image of God appears to be over. While the body is necessary for imaging God, it is not sufficient for doing so. (Similarly the neocortex is necessary but not sufficient for imaging God.) A body without neocortical functioning cannot image God according to the understanding of the image concept developed above. What is essential about humanness—namely, the capacity to image God—is irreversibly gone. Neither the ability nor the potential to live as the personal representative of Another is any longer present in the physical remains of the person. Neocortical destruction is both a necessary and sufficient condition for declaring an individual dead theologically. For this reason the discontinuance of nutrition and hydration appears to be justified.<sup>54</sup> The Christian, then, has a theological basis for distinguishing between the death of the body, with its residual

<sup>52</sup> I am not saying, as J. F. Fletcher does, that "neocortical function is the key to humanness, the essential trait, the human *sine qua non*" ("Four Indicators of Humanhood—The Enquiry Matures," *Hastings Center Report* 4 [December 1975], reprinted in *On Moral Medicine* [ed. S. E. Lammers and A. Verhey; Grand Rapids: Eerdmans, 1987] 276). I am saying that the essence of humanness is being the image and representative of God and that neocortical function is necessary to being that image.

<sup>53</sup> See J. W. Cooper, *Body, Soul, and Life Everlasting* (Grand Rapids: Eerdmans, 1989) 123–127. Cooper makes a convincing case for a holistic dualism in opposition to the anthropological monism of some Biblical scholars. But whether one leans toward a dualistic or monistic view of the human constitution it may still be argued that when the conscious personal life of the PVS individual has come to an end the body need not be artificially sustained.

<sup>54</sup> The conclusion that artificially supplied sustenance may be withdrawn in certain cases is accepted by many in the medical, ethical and philosophical fields. See e.g. S. H. Wanzer, S. J. Adelstein, R. E. Cranford *et al.*, "The Physician's Responsibility Toward Hopelessly Ill Patients," *Ethical Issues in Death and Dying* (2d ed.; ed. R. F. Weir; New York: Columbia University, 1986) 190–191. In the same volume see J. Lynn and J. F. Childress, "Must Patients Always Be Given Food and Water?" (pp. 215–229); D. Callahan, "On Feeding the Dying" (pp. 230–233). This is also the conclusion of the President's Commission, *Deciding to Forego* 171–196; Bouma *et al.*, *Christian Faith* 295–297; R. N. Wennberg, *Terminal Choices: Euthanasia, Suicide, and the Right to Die* (Grand Rapids: Eerdmans, 1989) 169–175. Many are opposed to this conclusion. See the statement "Feeding and Hydrating the Permanently Unconscious and Other Vulnerable Persons" prepared by W. E. May, G. Meilaender *et al.* in *Issues in Law and Medicine* 3 (Winter 1987). Some of the signers include H. O. J. Brown, A. T. Dyck, S. Hauerwas, J. K. Hoffmeier, D. J. Kennedy, G. W. Knight, III, J. W. Montgomery, R. J. Neuhaus, and the late P. Ramsey. The statement declares, in part, that "it is not morally right, nor ought it to be legally permissible, to withhold or withdraw nutrition and hydration provided by artificial means to the permanently unconscious" (p. 211). Also opposed to the view favoring withdrawal of feeding (even in cases of brain death), from a conservative Catholic viewpoint, is R. L. Barry, *Medical Ethics: Essays on Abortion and Euthanasia* (New York: Peter Lang, 1989).

movements, and the death of the person. Such an approach to the problem of the PVS patient does not ignore the findings of science but recognizes the limits of science in matters of Christian moral judgment.

## V. CONCLUSION

The human body must always be respected—in death and dying as well as in life—because the person who was, while on earth, the image of God functioned as God's representative through that body. But the prolongation of biological life in the apparent absence of personal life is not mandated by the Christian principle of respect for life.<sup>55</sup> Because equipment is available to feed a body does not mean that it should always be used. Some who oppose withdrawal of artificial feeding tubes are unwilling to have such devices connected to themselves or their loved ones in the first place, if their prognosis should be for a prolonged and permanent vegetative state. This unwillingness to connect feeding devices reveals that such persons actually agree that whatever may be used to prolong bodily existence is not always morally obligatory. If it were obligatory, no upright person should ever hesitate to connect artificial feeding equipment to a loved one who would by this means be enabled to live possibly many more years, if only in a vegetative state.<sup>56</sup>

In Christian ethics one's intention is always a key factor in determining the morality of a given action. To disconnect the feeding tube from a

<sup>55</sup> On the question of whether the PVS individual would experience pain after the fluid and nutrition are withdrawn, all indications are that this would not be the case. Christian physician W. S. Krabill writes that even with patients who are still alive, as in the case of dying cancer patients, death by starvation is "not a painful death if local care and moisture are provided to lips, mouth, and eyes. The rising level of waste products in the blood seems to provide a natural sedative and pain-relieving effect. When it comes to those in deep coma, there is even greater assurance that withdrawing tube feeding does not cause pain" ("Death and Dying: Prevailing Medical Perspectives," *Medical Ethics, Human Choices: A Christian Perspective* [ed. J. Rogers; Scottdale: Herald, 1988] 59). See also American Academy of Neurology, "Position" 125, for the three independent bases for their conclusion that PVS patients do not experience pain or suffering. With regard to "only caring" as opposed to continuing medical interventions on the dying, P. Ramsey notes that "we cease doing what was once called for and begin to do precisely what is called for now. We attend and company with him in this, his very own dying, rendering it as comfortable and dignified as possible" (*The Patient as Person* [New Haven: Yale University, 1970] 151).

<sup>56</sup> President's Commission, *Deciding to Forego* 73–77; Lynn and Childress, "Must Patients" 225; D. W. Brock, "Death and Dying," *Medical Ethics* (ed. R. M. Veatch; Boston: Jones and Bartlett, 1989) 342. Brock makes an important point: "A very common fear of patients, families, and physicians is that the patient will be 'stuck on machines.' To avoid this outcome, parties involved in decisionmaking may be reluctant to try life-sustaining treatment when its benefits are highly uncertain. This has the effect of denying life-sustaining treatment to some patients for whom it would have proved to be of genuine and substantial benefit and is indeed a serious harmful consequence of the reluctance to stop life support once it is in place" (p. 342). It may be, ironically, that those unwilling (because of a strong "pro-life" view, perhaps) to disconnect equipment already in place may be hastening the death of those who would otherwise live long if they had been sustained for a time by machines. Also see the very helpful discussion in Weir, *Abating* 401–403.

PVS individual must never be done with the intention to kill—to take a person's life. Our attitude and intention should be that of turning the individual over to God's providence, allowing the condition to take its course. Yet—as with many conditions judged “hopeless” by human standards—we may hope beyond all reason for hope that God will yet quicken the loved one if that would honor him and be best for the patient. Even though we may be quite reasonably assured that the individual's personal life is over, we may hope otherwise.

F. Edward Payne, a member of the Ethics Commission of the Christian Medical and Dental Society, agrees with the decision to pull Nancy Cruzan's feeding tube. He adds, however: “I do not agree with the decision not to feed her by mouth after the feeding tube was pulled.” Payne admits that the difference between these positions may seem small, but he considers it to be morally significant. He sees the continuance of mouth feeding as necessary “warm, personal care,” whereas artificial feeding is medical treatment and is not required when it no longer benefits the patient.<sup>57</sup> In a few PVS cases, individuals actually swallow oral feedings.<sup>58</sup> To disconnect the artificial feeding, while still attempting to feed the patient by mouth (even if such is unsuccessful), is to balance the desire for the patient's miraculous recovery with the desire for the body to be in as natural a condition as possible while physiological death approaches. One can “play God” by technologically prolonging death as much as by hastening death. The position presented here is not euthanasia, which is best defined as any action or omission which by intention causes the death of a supposedly hopeless person in order to end the person's suffering.<sup>59</sup>

We cannot deny that there is some risk of error in bioethical decision-making. The lines are not as sharply drawn as we would like.<sup>60</sup> Our ad-

<sup>57</sup> F. E. Payne, “A Time to Be Born, a Time for Treatment, and a Time to Die,” *World* (January 12, 1991) 19. See also Payne in n. 5.

<sup>58</sup> Weir, *Abating* 409.

<sup>59</sup> This definition includes the three elements necessary for a clear understanding of euthanasia: (1) It involves the taking of a human life, either one's own or that of another, (2) the life taken is that of someone believed to be suffering from a serious disease or injury from which recovery cannot reasonably be expected, (3) the action must be deliberate and intentional (J. Gay-Williams, “The Wrongfulness of Euthanasia,” *Euthanasia: The Moral Issues* [ed. R. M. Baird and S. E. Rosenbaum, Buffalo: Prometheus, 1989] 97–98). To discontinue or withhold artificial nutrition from PVS patients is not “passive euthanasia” as some would say. It is not euthanasia at all, since there is no intention to take a person's life. Theologically the “person” is already dead. Even if the guardian is not prepared to ascribe death to the PVS patient, the withdrawal of the feeding tube is not necessarily aiming at death. The commonly used distinction between “active” and “passive” euthanasia is more problematic than helpful and should be discontinued, leaving the term “euthanasia” to be used only with reference to intentional killing (as argued by Weir, ed., *Ethical Issues in Death and Dying* 243–244, see also Wennberg, *Terminal Choices* 109–112). Arguments against euthanasia (understood as intentional killing) from both special and general revelation are given by M. J. Erickson and I. E. Bowers, “Euthanasia and Christian Ethics,” *JETS* 19 (Winter 1976) 21–24; Gay-Williams, “Wrongfulness” 97–102; J. V. Sullivan, “The Immorality of Euthanasia,” *Beneficent Euthanasia* (ed. M. Kohl, Buffalo: Prometheus, 1975) 12–33.

<sup>60</sup> Cranford, “Patients with Permanent Loss” 187–188.



mittedly difficult but not (by God's grace) impossible task is to steer a right course on the one hand between an excessive devotion to biological existence as the highest of all values and on the other hand the disrespect for human life that discards anyone—in the womb, newly born, or elderly—who does not measure up to an arbitrarily established level of intelligence or value to society. It is of course always best to be on the safe side. Wisdom calls us to err on the side of keeping someone physically alive when the spirit may be gone rather than risk killing a person. But consider the magnitude of the problem. As indicated above, there are thousands of PVS individuals in our medical institutions. Every elderly person who does not succumb to a quick death faces the prospect of having his or her life artificially prolonged. As Schemmer states: "The potential of our technological nightmare has got to end somewhere, and the only way to end it lies in courageously making some decisions concerning it."<sup>61</sup>

This is not to say that as Christians we are compelled to make morally wrong choices at times in order to avoid greater difficulties in the future. Sin is never necessary for the Christian. Decision-making, however, is necessary. If the PVS condition can be shown to be total and irreversible, and if the loss of personhood can be considered death in a theological sense, there appears to be strong support for disconnecting artificial feeding. Those who intend to keep their PVS loved ones sustained by mechanical means are making one choice, and it should be respected.<sup>62</sup> Similarly those who, after prayerful and careful reflection upon the issues in the light of Scripture, in keeping with the law, decide to withdraw nutrition and hydration are making another choice. This, too, should be respected.<sup>63</sup>

<sup>61</sup> Schemmer, *Between Life and Death* 125

<sup>62</sup> Some are quite adamant, however, that the fluids and nutrition *ought* to be withdrawn in cases where they *may* be withdrawn. See e.g. H. Jonas, "The Right to Die," *Bioethics* (3d ed., ed. T. A. Shannon, Mahwah: Paulist, 1987) 205–206. See also Wennberg, *Terminal Choices* 171.

<sup>63</sup> A much-abbreviated version of this article appeared in *The Standard* (October 1991).