

YOU ONLY DIE TWICE:
AUGUSTINE, AQUINAS, THE
COUNCIL OF VIENNE, AND
DEATH BY THE BRAIN
CRITERION

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“The Church holds that death can be diagnosed on the basis of evidence that shows a complete loss of brain function, but may not be diagnosed if there is still some function of the brain.”



There are some who take what might be called a “two deaths view” or “mentalist view” about death. This is a view that distinguishes between death of the person and death of the body. It is a view defended by Robert Veatch,¹ who argues in effect that when a human being ceases to be able to function at those higher levels of activity that we consider to distinguish human or even sentient life, then the person has died even if the body continues to function. Peter Singer takes a slightly different but related view when he says that we should be able to take organs from those who are still alive

¹Robert M. Veatch “The Death of Whole-Brain Death: The Plague of the Disaggregators, Somaticists, and Mentalists,” *Journal of Medicine and Philosophy* 30, no. 4 (2005): 353–78.

but have lost the capacity for consciousness.² Veatch and Singer agree in that they argue that survival of the body without consciousness does not mean the status of a person. Among theologians, there are those such as Kevin O'Rourke,³ who have argued that because those who are in a state of post-coma unresponsiveness or so-called "vegetative state" are "unable to have a friendship with God," they can have nutrition and hydration withdrawn. The position is not explicitly that those in an unresponsive state are dead, but the implication is that maintaining their life is not a benefit. O'Rourke has not suggested that those who are permanently unconscious can be used as organ donors, but given that he thinks that maintaining their lives is not a benefit, the question is not irrelevant.

The positions adopted by Veatch, Singer, and perhaps O'Rourke would seem to imply that there may in fact be two deaths: the death of the person, when consciousness is permanently lost, and the death of the body, when biological life ceases.

The debate over whether there is more than one death is not new. The discussion today in some ways mirrors an age-old debate:

—St. Augustine (influenced by Plato) thought that there were many souls for different functions of the body and that there were two deaths: of body and of person.

—St. Thomas Aquinas (influenced by Aristotle) thought that the human being had only one soul and therefore only one death.

For Augustine, to be alive is to have a soul, and death involves a process leading to the absence of the soul.⁴ For Augustine, therefore, not only do human beings have souls, but so do plants and other animals.⁵ Augustine's view is not unlike what one finds, for example, in Plato⁶ or Aristotle⁷ where different levels of soul are

²Peter Singer, *Rethinking Life and Death: The Collapse of Our Traditional Values* (New York: St. Martin's Griffin, 1994); also see Peter Singer, *Writings on an Ethical Life* (New York: HarperCollins, 2000).

³Kevin O'Rourke, O.P., and Patrick Norris, O.P., "Care of PVS Patients: Catholic Opinion in the United States," *The Linacre Quarterly* 68, no. 3 (August 2001): 201–17.

⁴Stanford Encyclopedia of Philosophy, Accessed from: <http://plato.stanford.edu/entries/augustine/#3>.

⁵St. Augustine, *De libero arbitrio* I.8; *De quantitate animae* 70; *De civitate Dei* V.10.

⁶Plato, *Timaues* 89d–92c.

⁷*De Anima* 414b–415a.

discussed in terms of ascending degrees of complexity in their capacities, e.g., souls capable only of reproduction and nutrition, or of sensation and locomotion as well, or finally, of rational thinking.

St. Augustine taught that when “the brain by which the body is governed fails,” the soul separates from the body: Thus, “when the functions of the brain which are, so to speak, at the service of the soul, cease completely because of some defect or perturbation—since the messengers of the sensations and the agents of movement no longer act—it is as if the soul was no longer present and was not [in the body], and it has gone away.”⁸

What Augustine seems to have meant is that the person as we know him has died when the functions of the brain *that are at the service of the soul* cease completely. That is to say, he thought that bodily life may continue even though the soul has departed. The departure of the immortal soul is what the Church then and now understands to be the death of the person even though he or she will be resurrected. Death of the person, of course, does not mean death of the immortal soul, but its separation from the body.

The significance of Augustine’s position is that while the Church now believes that death is a single event that happens when the soul leaves the body and that this is characterized by the complete loss of integration of the body, Augustine adopted a view that when the parts of the body that maintain thought and memory no longer function, the soul has departed and therefore death of the person may in effect precede death of the body. This is what is referred to in modern terms as the “two deaths view.”

Augustine’s view is different from St. Thomas’ notion of the soul and body, which has been Church teaching since the Council of Vienne, namely, that it is the soul that forms or informs the body. On this view, Pope John Paul II asserted in 2000 that death is a singular event, not two events, and occurs when there is complete loss of integration. This happens when all parts of the brain have died. The contemporary view of the Church is that the departure of the soul is the death of the body and that what remains possesses only the non-integrated life of the individual organs, rather than the life of the body as an integrated whole. On the other hand, Augustine acknowledged that departure of the soul could happen even though the body continued to function and to live, the loss of

⁸St. Augustine (*De Gen. ad lit.*, L. VII, chap. 19; PL 34, 365).

soul being reflected in the loss of capacity for thought and memory, not the loss of life of the body.

In this Augustine may be in agreement with Singer and Veatch, though, of course, their statements are not concerned about what happens in life after death.

It is entirely consistent with the way in which the Church describes death to consider death to refer to the end of earthly life but not the end of the immortal soul. Thus the Catechism states:

By death the soul is separated from the body, but in the resurrection God will give incorruptible life to our body, transformed by the reunion with our soul. Just as Christ is risen and lives forever, so all of us will rise at the last day. (CCC, 1016)

It is a mystery to us what happens between death and resurrection. It is not at all clear that human beings experience life for a time as a soul only. There is no contradiction in referring to the death of the person when the human immortal soul no longer forms or informs the body and believing in resurrection of the body as the reuniting of an immortal soul with the body.

However, by contrast, the “two deaths” or “mentalist” view (irreversible loss of consciousness) requires some significant conceptual leaps. First, it would seem to involve an acceptance of either materialism or dualism, and second, a rejection of the Council of Vienne, which, following Boethius⁹ and Aquinas,¹⁰ adopted the notion of the unity of the human person with the soul as the substantial form of the body.

It also involves a medical leap in relation to consciousness and the observability of unconsciousness. In reality consciousness is an inference we draw from a person’s behavior. Loss of consciousness is not an observable or measurable phenomenon. That prompts the question whether irreversible coma is diagnosable while some brain functions continue. The evidence would suggest that it is not.

The significance of integration for the Church has been that while it exists we are unable to hold that the soul has left the body because integration provides evidence of the soul forming or

⁹Boethius, *A Treatise Against Eutyches and Nestorius*, trans. H. F. Stewart and E. K. Rand, ch. 3, <http://www.logoslibrary.org/boethius/eutyches/3.html>.

¹⁰Thomas Aquinas, *Summa theologiae* I, q. 75.

informing the body as a united whole. The words “forming” and “informing” were used in the decree that proclaimed the doctrine at the Council of Vienne:

. . . [T]he only begotten Son of God, subsisting eternally together with the Father in everything in which God the Father exists, assumed in time in the womb of a virgin the parts of our nature united together, from which he himself true God became true man: namely the human, passible body and the intellectual or rational soul truly of itself and essentially informing the body.

. . . We, therefore, directing our apostolic attention, to which alone it belongs to define these things, to such splendid testimony and to the common opinion of the holy fathers and doctors, declare with the approval of the sacred council that the said apostle and evangelist, John, observed the right order of events in saying that when Christ was already dead one of the soldiers opened his side with a spear. Moreover, with the approval of the said council, we reject as erroneous and contrary to the truth of the catholic faith every doctrine or proposition rashly asserting that the substance of the rational or intellectual soul is not of itself and essentially the form of the human body, or casting doubt on this matter. In order that all may know the truth of the faith in its purity and all error may be excluded, we define that anyone who presumes henceforth to assert, defend, or hold stubbornly that the rational or intellectual soul is not the form of the human body of itself and essentially, is to be considered a heretic.¹¹

This doctrine had a basis in the teaching of St. Thomas Aquinas in which he concludes that the human soul is a form united to the body, not immersed in the body but transcending the capacity of the whole of the corporeal matter and not rooted in any particular bodily organ.¹²

The determination that a person has died when they suffer complete loss of all brain function was readily accepted by the Catholic Church in the 1980s not on the basis that brain function was the center of intelligence or the mind, but that the brain is

¹¹Council of Vienne (1312). Accessed from: www.papalencyclicals.net/Councils/ecum15.htm

¹²Thomas Aquinas, *De Anima*, trans. John Patrick Rowan (London: Herder Book Company, 1949), art. 2, pp. 25f.

essential for integration of the body and without it the parts of the body cease to be an integrated whole. Without the brain, the body loses its form, so to speak, as the parts cease to be an integrated dynamic unity. This was explained by the 1981 U.S. President's Commission:

Prior to the advent of current technology, breathing ceased and death was obvious. Now, however, certain organic processes in these bodies can be maintained through artificial means, although they will never recover the capacity for spontaneous breathing or sustained integration of bodily functions, for consciousness, or for other human experiences.¹³

The argument that had wide acceptance at the time is that the traditional means of diagnosing death when circulation and respiration ceased did not equate human life to the function of the heart and lungs, rather it recognized that when those activities ceased there was an irreversible cessation of integrated functioning among the interdependent bodily systems. The determination of death by the loss of all brain function was supported on the basis that when artificial means of support mask this loss of integration as measured by the old methods, brain-oriented criteria and tests provide a new window on the same phenomenon. The Commission went on to say:

On this view, death is that moment at which the body's physiological system ceases to constitute an integrated whole. Even if life continues in individual cells or organs, life of the organism as a whole requires complex integration, and without the latter, a person cannot properly be regarded as alive.¹⁴

This view was endorsed in the explanation offered by Pope John Paul II in 2000:

It is a well-known fact that for some time certain scientific approaches to ascertaining death have shifted the emphasis from

¹³President's Commission for the Study of Bioethical Problems in Medicine and Biomedical and Behavioral Research, *Defining Death* (Washington D.C., July 1981), 3. Accessed from: http://bioethics.georgetown.edu/pcbe/reports/past_commissions/defining_death.pdf

¹⁴*Ibid.*, 33.

the traditional cardio-respiratory signs to the so-called “*neurological*” criterion. Specifically, this consists in establishing, according to clearly determined parameters commonly held by the international scientific community, the complete and irreversible cessation of all brain activity (in the cerebrum, cerebellum, and brain stem). This is then considered the sign that the individual organism has lost its integrative capacity.¹⁵

This view has come to be known as the loss of integration view. It is a view that has come under challenge with several recent developments including:

—Medical opinions stating that integration of the body continues in some who are diagnosed by the brain criterion;

—Authoritative medical sources, such as the Australia and New Zealand Intensive Care Society, which have indicated that some continuing mid-brain functions are consistent with a diagnosis of death determined by the widely accepted clinical criteria for determining death by the brain criterion;

—The law in the United Kingdom, which has been changed so that death can be declared on the basis of death of the brain stem alone rather than the whole brain death definition that the U.K. law had previously adopted, and which is still the law in the U.S., Australia, Canada, New Zealand, and many other places;

—Differences about the method of diagnosis of loss of all brain function: Australia, the U.S., and Canada rely on clinical tests alone, but many other countries (such as Spain, France, Italy, Singapore) require stricter medical criteria including a test to establish that there is loss of all blood flow to the brain;

—Claims for potential harm being done by the apnoea test (which is standardly a part of a diagnosis of death by the clinical criteria) and the fact that it is not of therapeutic benefit; and

—New “donation after cardiac death” issues, including a required time lapse after loss of circulation, the movement away from the legal requirement of irreversibility when death results from withdrawal of treatment that could be restored, the use of non-therapeutic interventions before death to facilitate organ preservation after death (Australian Organ and Tissue Donation and Transplanta-

¹⁵Address of John Paul II to the 18th International Congress of the Transplantation Society, 29 August 2000, n. 5.

tion Authority, 2009), and the absence of magisterial advice on the issue of donation after cardiac death.

Within the Church several different views have emerged. First, pediatrician Alan Shewmon and others have argued that the loss of integration view adopted by Pope John Paul II in 2000 and the U.S. President's Commission in 1981 is unsatisfactory because some integration of the body exists in some of those who have been diagnosed by the brain criterion. This information was accepted by the recent President's Council and led it to reject the loss of integration view and to substitute what it called a "mode of being" view. The adoption of the latter seems opportunistic. The rejection of the integration view and the adoption of a reductionist "mode of being" view allowed them to redefine diagnosis of death and the medical determinants of death when it occurs so that loss of spontaneous breathing and loss of consciousness are sufficient for a diagnosis of death. In other words, some brain function may continue in a person who is diagnosed by the brain criterion: so-called "brain death" therefore no longer means loss of all function of the brain.

In the face of this move toward a "mode of being" view, I aim to defend the Church's adoption of the loss of integration view against the President's Council and against the somatic integrationists, such as Shewmon. Shewmon fails to take into account the intercommunicative meaning of the body as an integrated whole, as well as the fact that the endocrine and neural systems, which unify the body by communicating with and between all parts of the body, are both dependant on brain functions. I argue that loss of all brain function therefore results in loss of integration in the intercommunicative and unitive sense that is relevant to the separation of the life principle or soul from the body that is death. Evidence of communication between some parts of the body is not the same as the body retaining evidence of unity of the whole body. The loss of the brain is not like the loss of an arm or leg, it is the loss of the capacity for communication between the parts of the body in a way that retains the functioning of a single unit.

The American bishops accept that the determination of death should be made by the physician or competent medical authority in accordance with responsible and commonly accepted scientific

criteria.¹⁶ The “Ethical and Religious Directive for Health Care Services” makes no more demand than that.

The Australian Catholic Bishops Conference approved the *Code of Ethics Standards* issued by Catholic Health Australia (CHA), which, following Pope John Paul II, explains death by the brain criterion in these terms:

The death of a human being consists in the total disintegration of the unitary and integrated whole that is the personal self. Although death is an event which cannot be directly identified, biological signs or “clinical markers” that inevitably follow can be recognised with increasing precision. These clinical markers indicate the irreversible loss of the integrated and coordinated life of the person as a single living organism.¹⁷

The CHA document then goes on to warn about pressures to change the way that death is determined from the loss of all brain function to the loss of some brain function. It also voices the need to resist such a change and to try to perfect the diagnostic criteria for death.

The Pontifical Academy for Science addressed the issue of doubts about death by the brain criterion in 2006. The Academy argued for the following conclusions:

—There is not more than one form of death.

—So-called “brain death” means the irreversible cessation of all the vital activity of the brain (the cerebral hemispheres and the brain stem). This involves an irreversible loss of function of the brain cells and their total, or near total, destruction. The brain is dead and the functioning of the other organs is maintained directly and indirectly by artificial means.

—Loss of all brain function is death because it is associated with loss of integration of the body as a single whole.

—Death by the brain criterion can only be diagnosed with certainty if there is evidence of no blood supply to the brain, and

¹⁶United States Conference of Catholic Bishops, *Ethical and Religious Directives for Catholic Health Care Services*, 4th ed. (NCCB/USCC, 2001), accessed 1/10/09 at <http://www.usccb.org/bishops/directives.shtml>.

¹⁷Catholic Health Australia, *Code of Ethical Standards*, approved for publication by the Australian Catholic Bishops Conference (2001), 46.

that the “established clinical criteria” was in most circumstances a reliable indicator for the loss of all brain function.¹⁸

The question for us today is whether the accepted standard for determining death by the brain criterion, as it is explained by the President’s Commission (and by ANZICS which sets the Australian medical standard) is acceptable or whether it has developed along the lines that are warned against by the CHA. It is certainly the case that the President’s Commission rejected the philosophical explanation on which the Church has relied in its acceptance of death by the brain criterion. Instead the Commission has proposed an entirely reductionist view as more consistent with the current practice of diagnosing death by the clinical criteria, and the latter allow that some brain functions may continue in a person who has been diagnosed as dead in this way.

The literature identifies several different views of death:¹⁹

1. *Disaggregators*

Death is a process, not a single event, and the key question is when removal of organs may begin. Thus Peter Singer²⁰ holds that the definition of death is not the issue. We can treat persons as dead and take their organs if they are no longer able to experience harm. We do not have to declare that they actually are dead. Some, like Singer, thus reject what is called the dead donor view.²¹

2. *Integrationists*

Loss of *all* brain function

¹⁸Pontifical Academy of Sciences, *Why the Concept of Brain Death is Valid as a Definition of Death: Statement by Neurologists and Others*, conference in Vatican City, 2006, at http://www.vatican.va/roman_curia/pontifical_academies/acdsien/2008/excerpt_signs_of_death.pdf

¹⁹I owe much of this analysis to Robert M. Veatch, “The Death of Whole-Brain Death: The Plague of the Disaggregators, Somaticists, and Mentalists,” *Journal of Medicine and Philosophy* 30, no. 4 (2005): 353–78. This analysis was previously published in Nicholas Tonti-Filippini, “New Issues in Organ Donation,” *Linacre Quarterly* 7, no. 4 (November 2006).

²⁰Peter Singer, *Rethinking Life and Death: The Collapse of Our Traditional Values* (New York: St. Martin’s Griffin, 1994).

²¹Peter Singer, “Is Our Changing Definition of Death for the Better?” *USA Today*, 18 May 1995.

3. *Somaticists*

No integration at organ level (Alan Shewmon)

4. *Mentalists*

Permanent lost consciousness or irreversible coma (Veatch)

5. *Mode of Being*

No spontaneous respiration and no other signs of interaction with environment (President's Commission, 2008)²²

The Christian tendency to accept the integrationist view is based on the notion that the human being is an embodied spirit and the soul is the form of the body—the soul forms matter into life. Irreversible loss of the integration of the body indicates that the matter is no longer formed or informed by a soul. We can then link a traditional understanding that death is the separation of the soul from the body with an integrationist view and in that respect hold that, given that the soul is the substantial form of the body, the life and the type of life imply the presence of a soul and, in our case, an intellectual soul. Christians cannot say confidently that the soul has separated from the body if the body remains actively integrated in the sense that the organs are in communication with each other and are functionally related as a single unity.

The point I wish to add to this conclusion is that the notion of integration implies that the parts of the whole are intercommunicative with each other as a dynamic unity. Empirically the brain is necessary for that intercommunication, because it mediates the two systems that are essentially responsible for that intercommunication, the neural and endocrine systems.

We can take from the doctrine proclaimed at the Council of Vienne that the ongoing causative effect of the soul is its informing the body. Therefore the type of integration that is relevant is a communication of information to all parts of the body. Because integration implies unity, the type of integration that is relevant is the transfer of information that keeps the body united and hence a single whole.

²²President's Council on Bioethics, *Controversies in the Determination of Death: A White Paper*, January 2009, Accessed December 2009 from <http://bioethicsprint.bioethics.gov/reports/death/index.html>.

On these grounds I would argue that Shewmon and others are wrong to claim that the type of integration that may subsist in the body after loss of all brain function is relevant. The transfer of information merely between one part of the body and another is insufficient to establish that the soul has not separated from the body. For instance, circulation in itself is not a transfer of information that integrates the body. Rather it is a means by which information might be transferred such as happens through the endocrine system. Similarly, in a person lacking both a unified neural system and a unified endocrine system, healing of one part of the body involving activities of other parts of the body would seem to involve only parts rather than the whole and hence is not integrative in the sense of preserving the unity of the whole.

Most of the examples that Shewmon has given of integration in someone who lacks all brain functions do not involve integration in the sense of a communication that unites the parts of the whole. They do not provide evidence that indicates that the soul has not separated from the body.

Shewmon's report of a case, however, in which there was complete loss of all brain function but the body maintained homeostasis, does challenge the integration explanation. Homeostasis is the maintenance of equilibrium in the body with respect to various functions, such as blood pressure and the chemical compositions of the fluids and tissues.²³ Homeostasis would seem to involve the transfer of information in a way that keeps what is left of the body functioning as a single dynamic unit. Thus one might conclude that it is evidence that the body is being maintained as a single functioning being with the parts in a functioning relationship to one another. I am troubled by this, though in general I do not think that Shewmon has been rigorous enough in what he considers to be integration. The evidence of integration is employed as evidence that the soul may remain and therefore the concept needs to be integration in the relevant sense of preserving functional unity of the body which is the effect of the soul continuing to "form the body." I am inclined to conclude that it is difficult to hold that functional unity of the body can exist when a major part, the brain, is no longer functioning. The remaining integration can only be partial.

²³*Stedman's Medical Dictionary*, 27th ed., 2005.

Shewmon's claims about homeostasis in people who have suffered loss of all brain function have been regarded as controversial and were not accepted by the Pontifical Academy for Life.²⁴ To support his claim Shewmon has made available the medical reports of a man known in the literature as "TK." His evidence has been accepted by the President's Council on Bioethics²⁵ and given as the reason for rejecting the notion of loss of integration as an explanation for death by the brain criterion. It is deeply troubling that the President's Commission accepted this evidence as a reason for abandoning the integration explanation for death by the brain criterion. My view is that they did not give adequate consideration to what integration was meant to be in relation to its being evidence that the soul had not separated from the body. I am also unsure whether TK suffered complete loss of all brain function or was diagnosed by the clinical tests alone. That he retained blood pressure control is not consistent with my understanding that that is a brain stem-mediated activity and that in brain death there is loss of central vasomotor control, resulting in the need to maintain heat function and blood pressure artificially.²⁶

Somaticists, such as Alan Shewmon, maintain that the body has no primary integrative organ and that if brain stem-mediated somatic integration "counts" for life-death status, so should spinal cord-mediated somatic integration. They argue that the body without brain function remains an integrated whole, and therefore, loss of all brain function does not result in loss of an integrated whole. But Shewmon does overlook the intercommunicative meaning of integration. What he considers to be "integrative" is something less than would seem to be meaningful in the context of considering that death is the separation of the life principle or soul from the body. Not having a life principle or soul would seem to be

²⁴Pontifical Academy of Sciences, *Why the Concept of Brain Death is Valid as a Definition of Death: Statement by Neurologists and Others*.

²⁵*Controversies in the Determination of Death: A White Paper* (January 2009), chapter 4.

²⁶S. S. Florman, T. E. Starzl, C. M. Miller, "Organ Procurement" in *ACS Surgery: Principles & Practice*, ed. D. W. Wilmore, L. Y. Cheung, A. H. Harken, et al. (New York: WebMD Inc., 2003). Available at: <http://www.medscape.com/viewarticle/449855>. E. F. M. Wijdicks, "The Diagnosis of Brain Death," *New England Journal of Medicine* 344 (2001): 1215–20.

inconsistent with the body retaining intercommunication between the parts in such a way that the body remained a functional whole. However, the fact that there is some communication between some part and some other parts would not seem to indicate integration as a functional whole.

The 2009 President's Council on Bioethics²⁷ wished to reaffirm the ethical propriety of the "dead donor rule" (DDR) and the ethical acceptability of the neurological standard (total brain failure, including the brain stem) as well as the cardiopulmonary standard (irreversible cessation of both cardiac and respiratory functions). The Council rejected the use of patients in permanent vegetative states (post-coma unresponsive state) as organ donors. In relation to death they recognized two important positions: the integrationist (like John Paul II and the Pontifical Academy), and the "mode of being" (both described above). The Council rejected the "two deaths" approach (loss of consciousness and loss of bodily life).

In relation to the integrationist and "mode of being" views, the majority rejected the integrationist view by accepting the somaticist view of integration. But instead of adopting the latter's conception of death, they proposed a new view, the "mode of being" view. The Council majority then placed emphasis on spontaneous breathing as evidence that the human mode of being continues as an interaction with the environment, and that loss of spontaneous breathing is significant though not sufficient to diagnose death if there is evidence of other aspects of the human mode of being such as consciousness. Therefore the medical determination of death by the "mode of being" view could be diagnosed without requiring loss of all brain function. All that is required is:

- Evidence of loss of spontaneous breathing
- No other evidence of interaction with environment.

Loss of clinical brain stem responses is taken to supply that evidence, provided that masking circumstances are excluded.

The "mode of being" view rather than the integrationist view allows some brain functions (such as hypothalamic pituitary axis

²⁷President's Council on Bioethics, *Controversies in the Determination of Death: A White Paper* (January 2009), chapter 4, accessed December 2009 from <http://bioethicsprint.bioethics.gov/reports/death/index.html>

in mid-brain) to be present in a person diagnosed as dead by the brain criterion. It depends only on loss of spontaneous respiratory function and no evidence of brain stem functions.²⁸

The problem is that the Church has supported the notion of determining death by the brain criterion on the grounds that the brain is essential for the body to be an integrative whole. This requires evidence of loss of *all* brain function. However, it would appear that many in the medical community, including the President's Council majority, reject the scientific basis of this integrative view on the grounds that the body without a functioning brain retains some integration. The alternative "mode of being" view, based on loss of breathing and consciousness, admits that continued integration and some brain function may continue in someone who is diagnosed as dead by the brain criterion. The "mode of being" view is most definitely not consistent with the above doctrine established at the Council of Vienne. It is not based on separation of the soul but appears to be a materialist view that bases the status of the dying persons not on their ontological status as human beings, but on whether they continue to demonstrate specifically human functions—hence the emphasis on "mode of being." This emphasis is more consistent with the view espoused by Augustine and rejected by the Council of Vienne.

In Australia, the fact that ANZICS too has adopted a standard that allows some brain function would seem to be on the same philosophical plane as the President's Council, and that it has rejected the philosophical approach taken by the Church indicates that as Catholics we can no longer rely on the secular application of the concept of death according to the notion that there is irreversible loss of all brain function. The secular medical standards would not seem to apply that definition strictly.

The chair of the President's Council, Dr. Edmund Pellegrino, M.D., basically jumped ship, rejecting not only the President's Council majority, but also the position taken by the Church in favor of defining death by the irreversible loss of all brain function. He stated in his minority report that defining death as separation of soul and body does not provide a working definition of death, and that lacking such an adequate working definition of

²⁸*Controversies in the Determination of Death: A White Paper.*

death, the clinical determination of death by the brain criterion remains uncertain.²⁹

Pellegrino asserted instead that the irreversible loss of circulation remains a more certain determination of death than loss of all brain function. In effect he reverted to the original view espoused by Hans Jonas³⁰ at the time of an earlier President's Commission.³¹ That Commission accepted the view put forth by the Harvard Committee, which then informed the U.S. uniform definition of death according to the brain criterion.

With Jonas, Pellegrino asserted that we do not know with certainty the borderline between life and death, and that a definition cannot substitute for knowledge. Moreover, we have sufficient grounds to suspect that the artificially supported condition of the comatose patient may still be one of life, however reduced. Thus we have reason to doubt that, even with the brain function gone, a patient is completely dead. In this state of marginal ignorance and doubt the only course to take is to defer on the side of possible life.

Another dissenting member of the President's Commission in 2009 was the philosopher Alfonso Gomez-Lobo. He argued that if a body is able to process nutrition, eliminate waste, and exhibit proportional growth, homeostasis, etc., and moreover, it engages in these functions in an integrated manner, we correctly deem it to be alive. If it fails to do this and starts to decompose and disintegrate, we will rightly judge it to be dead. On that basis Gomez-Lobo claimed that loss of brain function does not equate with death.³²

There is a need to resolve the public confusion that has begun to be generated, and that is likely to become worse now that there is a division of opinion between the Church and those like ANZICS and the President's Commission who have moved away from an integrationist view. The Church holds that death can be diagnosed on the basis of evidence that shows a complete loss of

²⁹http://www.bioethics.gov/reports/death/pellegrino_statement.html.

³⁰Hans Jonas, "Against the Stream," in *Philosophical Essays: From Ancient Creed to Technological Man* (Englewood Cliffs, N.J.: Prentice-Hall, 1974), 138. Cf. *Controversies in the Determination of Death: A White Paper*, chapter 3.

³¹President's Commission for the Study of Bioethical Problems, *Defining Death*.

³²http://www.bioethics.gov/reports/death/gomezlobo_statement.html.

brain function, but may not be diagnosed if there is still some function.

This would seem to be the situation that the *CHA Code of Ethical Conduct* warns about: changes are being made to the way death is determined, moving from the loss of all brain function to the loss of some brain function. The *Code* indicates the need to resist such a change and for Catholic hospitals to try to perfect the diagnostic criteria for death.

In that respect it remains important to ensure that so-called brain death is a term that is not used loosely or for anything other than loss of all function of the brain. It is also important to distinguish between death by the brain criterion and irreversible coma (or unresponsiveness).

As has been discussed above, the ANZICS statement and the NHMRC concede that the clinical criteria alone do not establish loss of all function of the brain, but may indicate that a known process, resulting in destruction of parts of the brain and evident by other testing and the medical history, has extended to include parts of the brain stem. The clinical tests may be sufficient for the U.K. definition of death as brain stem death, but they would appear not to be sufficient for the American, Canadian, Australian, and New Zealand legal contexts, which require evidence of loss of *all* brain function.

In that respect, Catholic hospitals could insist that ancillary tests including brain perfusion tests be done standardly as part of diagnosing death by the brain criterion to establish greater certainty that loss of all function of the brain has indeed occurred.

Further, from a family perspective, potential donors and their families might be advised by the Church that in our pluralist society there are different views and different practices about death by the brain criterion, and that they would have a right to insist that the apnoea test not be done prior to a negative blood flow test result because it is not of therapeutic benefit and may be harmful if some brain function remains. The diagnosis of death by the brain criterion should therefore involve imaging of blood flow to the brain to ensure that there was indeed loss of all brain function. Doing so would also provide families with some convincing images indicating lack of blood supply to the brain and greater confidence that death has indeed occurred. Doing the blood flow test first would also avoid concerns about the apnoea test causing brain damage.

In relation to Donation after Cardiac Death (DCD) there is a need to resolve some key issues surrounding the diagnosis in the circumstances of a controlled death. First, there is a need for clarity about there being an independent decision to withdraw life support on the genuine grounds that it is either ineffective or overly burdensome, and that consent has been obtained to withdraw that treatment.

Second, there needs to be a clear policy that determines how soon after cessation of circulation it is considered irreversible, so that death may be declared and organ procurement begin. The policy needs to recognize that children may involve a much longer time and the cause of death may be relevant. It is also the case that if hearts are obtained for transplantation after cardiac death, then the community may question whether the loss of circulation at the time of death was indeed irreversible.

There is also a need to resolve the issue of whether cessation of circulation must be irreversible or, on the other hand, only permanent on the grounds that resuscitation will not be attempted and life support treatment will not be restored. It would be an odd situation if death could be declared and then a change of treatment decision resulted in circulation being restored.

The use of interventions (such as femoral cannulation or treatment to prevent clotting) before death to facilitate organ procurement of transplantable organs after death should only be permitted if the patient, while competent, had consented to such non-therapeutic procedures for the purpose of organ procurement and transplant, or the family had good reason to think that this was the patient's view. Such treatments are ethically similar to altruistic decisions to donate tissue while one is alive. They are a non-therapeutic intervention that is not in the interests of the patient, but undertaken to facilitate major organ donation to someone else. □

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