CURRENT CONTROVERSIES OVER DEFINING DEATH AND TRANSPLANTING VITAL ORGANS FROM THE CORPSES OF HUMAN PERSONS

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Introduction

A current issue of crucial importance focuses on the definition of death and on criteria for determining that a person has died. This issue is critical because it is possible to save the lives of persons who are threatened by death because one or more of their vital organs — the heart, lungs, liver, etc. — no longer function. Although paired vital organs such as kidneys can be provided for them by living donors, such donors cannot be used as the source of unpaired vital organs such as the heart, but a possible source for such organs (and of paired vital organs as well) is the “body” of a person who has just died. But organ transplants from a cadaver must take place almost immediately after death. Were the transplantation delayed, the organs in question would quickly deteriorate and would no longer be of any help in preserving the lives of those in need of them.

In the legitimate desire to obtain a life-saving organ for a fellow human being whose life can be saved by transplant surgery, it is necessary firmly to resist any temptation to diminish care of a dying person because he or she happens to be a prospective donor. This is the reason why

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1 I want to thank my colleague E. Christian Brugger and Mark Latkovic for reading, correcting, and improving an earlier draft of this paper.
the World Medical Assembly, at a 1968 meeting in Sydney, Australia, accepted the principle that there be complete separation of authority and responsibility between the physician or group of physicians charged with caring for the dying person and the physician or group of physicians whose task is to care for the person in need of an organ. It is for this reason that one of the provisions of the Uniform Anatomical Gift Act is the following: “The time of death shall be determined by a physician who attends the donor at his death, or, if none, the physician who certifies the death. This physician shall not participate in the procedures for removing or transplanting a part.”

Our legitimate concern in the practical order to protect the dignity of the dying person is paralleled, or ought to be paralleled, in the intellectual order with a concern to separate the question of defining death and the use of organs for transplants. The late Paul Ramsey forcefully made this point when he said:

If in the practical order we need to separate between the physician who is responsible for the care of a prospective donor, and the physician who is responsible for a prospective recipient, do we not need in the intellectual order to keep the question of the definition of death equally discrete from the use of organs in transplantations? If only the physician responsible for a dying man should make the determination that he has died, with no “help” from the medical team that has in its care a man who needs a borrowed organ, should not also the definition of death and the tests for it that he uses be ones that he thinks are sound or were agreed to by the profession without having transplantation in view? There would be too little protection of life attained in the practical order by entirely separating the authority and responsibility of the teams of physicians if the definition of death and the tests used for it have already been significantly invaded by the requirements of transplant therapy. If no person’s death should for this purpose be hastened, then the definition of death should not for this purpose be updated, or the procedures for stating that a man has died be revised as a means of affording easier access to organs.

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Since the end of the 1960’s a widely accepted criterion—in addition to the pulmonary-coronary criterion—has been the “neurological” criterion (popularly but mistakenly known as “brain death) has been accepted in some form of law throughout the world and in the U.S.A. Thus in 1981 this consensus was well articulated by the members of the U.S. President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. The 1991 report of the Commission advocated statutory enactment of a Uniform Definition of Death Act. This act provides that an individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions or (2) irreversible cessation of all functions of the entire brain, including the brain stem (my emphasis), is dead. Thus the Presidential Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research’s Report Defining Death: A Report on the Medical, Legal and Ethical Issues in the Determination of Death declared: “if the functioning of the brain is the factor which principally integrates any organism which has a brain, then if that function is lost, what is left is no longer as a whole an organic unity.” According to this rationale, neurological criteria for death did not represent a new definition of death, but just gave more precise criteria for determining that bodily death had occurred.

The donation of organs for transplantation was welcomed by the Catholic Church. In 1956, Pope Pius XII taught that donation of organs after death was not “a violation of the reverence due to the dead” rather, it was an expression of “merciful charity shown to some suffering brothers and sisters.” Pius’s teaching—reaffirmed by Pope John Paul II (on this, see

4 http://bioethics.georgetown.edu/pcbe/reports/past_commissions/defining_death.pdf
6 Pope Pius XII, “Allocution to Eye Specialists” 14 May, 1956.
below) has been incorporated into number 2296 of the *Catechism of the Catholic Church*, which reads as follows: “Organ donation after death is a noble and meritorious act and is to be encouraged as an expression of generous solidarity.”

Pius XII also recognized that determining the time of death was a matter of *medical* rather than *theological* or *magisterial* competence. “It remains for the doctor, and especially the anaesthesiologist, to give a clear and precise definition of ‘death’ and the ‘moment of death’ of a patient who passes away in a state of unconsciousness.”  

**Purpose and Scope**

Catholic scholars, who accept magisterial teaching (=the authoritative teaching of those who, in the Church, have the God-given authority to speak in the name of Christ matters of both faith and morals), are debating this controversial issue. Some affirm, others deny, the validity of the “neurological criterion” for determining that a person has died. My precise purpose is to answer the question, “Are those who reject as invalid the ‘neurological criterion’ for determining that a human person has died disloyal Catholics?” After all, the most authoritative magisterial statement, so far as I am aware, is the one made by the late Pope John Paul II in an Address he gave on August 29, 2000, to the 16th Annual Conference of the Transplant Society. In this Address, no. 5 he declared:

> It is a well-known fact that for some time certain scientific approaches to ascertaining death have shifted the emphasis from 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…[I]t can be said that the criterion adopted in more recent times for ascertaining the fact of death, namely the *complete* and *irreversible* cessation of all brain activity (emphasis in original), if rigorously applied, does not *seem* (my emphasis) to

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7 Pius XII “Address to an International Congress of Anesthesiologists” 24 November, 1957.
conflict with the essential elements of a sound anthropology. Therefore a health-worker professionally responsible for ascertaining death can use these criteria in each individual case as the basis for arriving at that degree of assurance in ethical judgement which moral teaching describes as "moral certainty". This moral certainty is considered the necessary and sufficient basis for an ethically correct course of action. Only where such certainty exists, and where informed consent has already been given by the donor or the donor's legitimate representatives, is it morally right to initiate the technical procedures required for the removal of organs for transplant.\(^8\)

In other writings on this issue, John Paul II, like his predecessor Pius XII, made it clear that the competence to set forth the criteria for determining that a human person has died is not within the competence of the Magisterium. Thus, for example, in his “Discourse to the Participants of the Working Group of the Pontifical Academy of Sciences at a meeting held in Rome December 10-14, 1989,"\(^9\) he said that two tasks must be addressed. The first concerns scientists, analysts and scholars (my emphasis), who “must pursue their research and studies in order to determine as precisely as possible the exact moment and the indisputable sign of death. For, once such a determination has been arrived at, then the apparent conflict, between the duty to respect the life of one person and the duty to effect a cure or even save the life of another, disappears. One would be able to know at what moment it would be perfectly permissible to do what had been definitely forbidden previously, namely, the removal of an organ for transplanting, with the best chances of a successful outcome.” A second task concerns moralists, philosophers, and theologians who must exercise the virtue of prudence in finding appropriate solutions to new problems and new aspects of age-old problems in light of new data.\(^10\)

Note that John Paul said that the neurological criterion did not seem to conflict with the demands of a sound anthropology.

\(^8\) [http://www.vatican.va/holy_father/john_paul_ii/speeches/2000/jul-sep/documents/hf_jp-

\(^10\) Ibid.
On September 8, 2008, *L’Osservatore Romano* (Italian version) published an essay “I Segni della morte: A quarant’anni dal rapporto di Harvard” (“The Signs of Death: 40 Years After the Harvard Report” by Lucetta Scaraffia, a professor of contemporary history at the Rome university "La Sapienza." Scaraffia’s article in that issue of *L’Osservatore* was summarized in the Italian journal *Chiesa*, Here I shorten and paraphrase this summary as follows:

40 years ago, on August 5, 1968, the *Journal of the American Medical Association* published the ‘Harvard report’ that established the total cessation of brain activity as determining that a person has died. All of the countries of the world rapidly adopted this standard. The Catholic Church did also, particularly in reports in 1985 and 1989 from Working Groups of the Pontifical Academy of Sciences. John Paul II who accepted these reports and reaffirmed this acceptance in his Allocuion to the 16th International Congress of the Transplantation Society, on August 29, 2000. This position was defended by Cardinal Dionigi Tettamanzi before 2000, when he, a former professor of moral theology, was keenly interested in bioethical issues. After him, the Church authorities most often consulted on this matter were Bishop Elio Sgreccia, until recently the president of the Pontifical Academy for Life, and Cardinal Javier Lozano Barragán, president of the Pontifical Council for Health Pastoral Care. Beneath the surface, however, doubts were growing in the Church, as illustrated by an entire chapter of a book published recently in Italy: Paolo Becchi’s “I Segni della morte e la questione dei trapianti,” Becchi is professor of the philosophy of law at the universities of Genoa and Luzern, and a pupil of a Jewish thinker who dedicated concerned reflections to the question of the end of life, Hans Jonas. According to Jonas, the new definition of death established by the Harvard report was not motivated by any real scientific advancement, but rather by the need for organs for transplants. It is especially in the Church that critical voices are gaining strength. In January 3-4, 2005, the Pontifical Academy of Sciences again met to discuss the question of the ‘signs of death,’ and the experts present – philosophers, jurists, neurologists from various countries – found themselves in agreement in maintaining that brain death is not the death of a human being, and that the criterion of brain death, not being scientifically credible, should be abandoned.

This conference shocked Vatican officials who accepted the Harvard report. Bishop Marcélo Sánchez Sorondo, chancellor of the Pontifical Academy of Sciences, was instrumental in preventing publication of the proceedings. A substantial number of the speakers then gave their texts to an outside publisher, Rubbettino. The result was a book with the Latin title *Finis Vitae*, edited by Professor Roberto de Mattei, deputy director of the National Research Council…. The book was published in two editions, in Italian (in 2007) and English [not published until several years later]. It presented eighteen essays, half of them by scholars who had not participated in the conference of the Pontifical Academy of Sciences, but shared its views. These include Professor Becchi. Among those who did speak at the conference, special mention should be made of Josef Seifert and of the German philosopher Robert Spaemann, who is highly respected by Pope
Joseph Ratzinger, who, as Pope Benedict XVI, has never spoken directly on this question… But it is known how much he respects the arguments of his friend Spaemann. Another contributor to *Finis Vitae* was the respected German Catholic philosopher, Wolfgang Waldstein.

It is significant that Scaraffia’s article was published in *L’Osservatore Romano*. Although this paper “acts as an official outlet of the Holy See only in the section ‘Our Information,’ which presents the appointments, audiences, and activities of the pope. Almost all of its articles are printed without advance review by the Vatican authorities, and fall under the responsibility of the authors and the director of the paper, Professor Giovanni Maria Vian. This does not change the fact that the article has broken the silence on views questioning the ‘Harvard Report’ in a newspaper that in any case is known as ‘the pope's newspaper.’”

**Reasons For Questioning the “Neurological” Criterion**

Since the mid-1990s, an increasing number of philosophers, bioethicists, and physicians, Catholic and non-Catholic alike, have provided further evidence and arguments to reinforce doubts that some had had for many years regarding the validity of the “neurological criterion” for determining that a human person was dead. The most significant critic has been D. Alan Shewmon, M.D. The current state of doubts and confusion over the validity of this criterion (popularly known as “brain death”) was well expressed by the United States President’s Council on Bioethics Report of 2008, *Controversies in the Determination of Death*:

There remains considerable public confusion, both about the meaning of the term ‘brain dead’ and about its relation to the death of a human being. There is persistent dissent by some clinicians, philosophers, and other critical observers who have never been convinced that ‘brain death’ is, indeed, the death of the human being. There are, as well, pressures against insisting that declaring death, or at least ‘organ donation eligibility,’ requires the irreversible loss of function in the whole brain. And, perhaps most important, there are critics who have published evidence of ongoing integrated bodily activities in some persons meeting the criteria of ‘whole brain death’ and who have claimed that this evidence invalidates the rationale for today’s consensus position.

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11 [www.chiesa.expressionline.it](http://www.chiesa.expressionline.it).
Procedure

Since my concern focuses on the obligation of Catholic scholars to render “loyal submission of the will and intellect must be given, in a special way, to the authentic teaching authority of the Roman Pontiff, even when he does not speak ex cathedra…” (Vatican Council II’s *Dogmatic Constitution on the Church Lumen Gentium*, no, 25), I will now proceed as follows:

1. Summarize a valuable review of *Finis Vitae* to illustrate the problem;
2. Summarize Paolo Becchi’s “I Segni della morte e la questione dei trapianti”
3. Summarize the view of D. Alan Shewmon, M.D., R. D. Truog, M. D. and J. Flacker on Transplanting Vital Organs;
4. Summarize the view of Edmund D. Pellegrino, M.D.;
5. Summarize Nicanor Austriaco, O.P.’s position on the criterion to determine that a person has died;

I will then offer a Conclusion.

1. *Finis vitae: Is Brain Death Still Life?*

Randy Engel’s extensive review of this book is very helpful.¹² I present my own paraphrase and summary of major points developed in this review. In his “introduction, Paul A. Byrne reports that in 2004, Pope John Paul II asked a group of faithful lay Catholics to collaborate with the Pontifical Academy of Sciences (PAS) to re-examine in depth the issues of

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"brain death" and unpaired vital organ transplantation. Previous official meetings held by the PAS on these critical matters in 1985, and again in 1989, were with few exceptions, dominated by scientists and physicians who accepted the “brain death” and did little to show the true nature and implications of the controversies surrounding the definition of "brain death" as a valid criterion for true death, and the institutionalized practice of excising unpaired vital organ from living persons for transplantation purposes. One of the key provisos imposed on organizers of the meeting by the Vatican was that both sides of the issues, pro and con, be equally represented at the conference.

On February 3-4, 2005, "The Signs of Death" Conference was convened in Vatican City by the PAS. At the conclusion of the conference, the usual preparations were made to print and distribute the proceedings of the conference, but at the 11th hour, the printing was called off without any explanation.

This was more than a bureaucratic error, and this became evident when the PAS organized another conference on September 11-12, 2006, under the same title "The Signs of Life." But this time the Vatican did not require that all points of view, pro and con, be represented. Participation was limited to those in favor of "brain death," and the proceedings were printed and distributed without any delay.

Byrne and his colleagues who opposed "brain death" decided to publish their papers from the original 2005 "The Signs of Death" Conference under the auspices of the National Research Council of Italy. The Italian version of Finis Vitae, edited by Professor Roberto de Mattei, was published in 2006. And in 2009, the English version was edited and updated by Dr. Byrne and published in 2011 by the Life Guardian Foundation. The eighteen papers published in Finis Vitae in opposition to "brain death" were written by world-class neurologists, philosophers,
neonatologists, jurists, and bioethicists. Among the authors 4, in addition to Byrne and Bishop Fabian Bruskewitz of Lincoln NE, are respected as good and loyal Catholics and are members of the Pontifical Academy of Life, namely, Robert Spaemann, Josef Seifert, Wolfgang Waldstein., and D. Alan Shewmon; and the first three are personal friends of Pope Benedict XVI.

Here, summarized, are some of the arguments advanced by contributors to *Finis Vitae* to discredit “brain death.” Spaemann declared:

The new definition of death as "brain death" makes it possible to declare people dead while they are still breathing and to bypass the dying process in order to quarry spare parts for the living from the dying. Death no longer comes at the end of the dying process, but …at its beginning. The [Harvard] commission intended to provide a new definition [of death], clearly expressing their main interest. It was no longer the interest of the dying to avoid being declared dead prematurely, but other people's interest in declaring a dying person dead as soon as possible.13

Spaemann reminded card-carrying donors and their families to be aware that "A transplantation physician professionally sides with the recipient, not the donor of organs."14 The practical application of this obvious conflict of interest is that the donor card may become the donor's death warrant.

Another contributor, Cicero Galli Coimbra, M.D., PhD, a Clinical Neurologist at the Federal University of Sao Paulo, Brazil, pointed out, "... nowadays many brain injured patients conceivably evolve to deep coma and are submitted to diagnostic procedures for BD/BSD (brain death/brain-stem death) without having even received the current standard of basic care to prevent further brain injury from secondary insults (emphasis added). Among these tests is the

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14 Idem, ibid, p. 262.
apnea test for determination of "brain death," which is administered for the ultimate benefit of the organ recipient not the injured patient.  

The need to end the practice of carrying out the deadly apnea test on potential organ donors to determine "brain death" is another major theme found in *Finis Vitae*. While this test is often categorized as "cardinal," "essential," "central," or "mandatory," in reality, it has no therapeutic purpose whatsoever for the potential donor. Its primary purpose is to determine whether the patient can or cannot breath on his own in order to declare him "brain dead," and thus eligible to be an organ donor. True informed consent concerning the nature of and dangers posed by the test are usually withheld from family members lest they withhold support for the test, without which the transplantation protocol cannot proceed. 

In another of Coimbra's essays, "The Apnea Test — A Bedside Lethal 'Disaster' to Avoid a Legal 'Disaster' in the Operating Room," the neurologist states that the apnea test administered to the seriously brain injured patient may cause "irreversible damage to brain tissue," and even death.  

Coimbra maintains that the apnea test is not only "undoubtedly unethical" but it is also "technically useless for its own intended or declared purpose of characterizing the irreversible loss of respiratory reflex." Coimbra notes that "too many lives have been lost during the last decades of blindness, when the diagnosis of 'death' has been applied to the silent brain receiving critical levels of blood supply….A patient who would have hopelessly died years ago, may now

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15 Cicero Galli Coimbra, "Are 'brain dead' (or 'brain-stem dead) patients neurologically recoverable?" *Finis Vitae*, p. 335.


17 Ibid, pp. 136, 137.
recover by novel and effective therapies developed from improved knowledge on the pathophysiology of coma.\textsuperscript{18}

Josef Seifert, Wolfhart Waldstein, also members of the Pontifical Academy of Life, and the Most Reverend Fabian Bruskewitz, Bishop of the Roman Catholic Diocese of Lincoln NE, agreed with Spaemann and Coimbra and contributed essays to \textit{Finis vitae}. Seifert and Waldstein, like their German-language colleague Spaemann, have long argued against the validity of “Brain death” as a criterion for determining that a human person has died. In addition to their essays in \textit{Finis Vitae}, they have written frequently to criticize this criterion.

In addition to his essay in \textit{Finis Vitae}, Spaemann’s clear presentation during an international bioethical conference that took place in Rome in October 2002 is most valuable. It is published in Italian as “La morte della persona e la morte dell’essere umano,” in \textit{Lepanto}, Vol. 162, no. XXI (December 2002).

2. Paolo Becchi’s “I Segni della morte e la questione dei trapianti”

Becchi begins by noting that the “brain death” criterion reflected scientific knowledge of the time it was so widely accepted because it seemed to prove the theory that patients in a irreversible coma were destined to die of a cardiac arrest in a short time; moreover, it greatly helped the development of transplant surgery; finally, it would not constitute mercy killing because a patient whose brain had completely stopped working was dead, and therefore removing his vital organs would not kill him.

But in the United States of America this definition was soon challenged and reconsidered. Strong philosophical doubts about the new definition of death were raised immediately by the great philosopher Hans Jonas, who voiced strong objections to it a month after the Harvard

\textsuperscript{18} Ibid, p. 161.
report. According to Jonas we do not know exactly the borderline between life and death and a
definition introduced with the clear intention to encourage the removals of organs cannot replace
that cognitive deficit.

Next Becchi stressed two crucial points on this subject. The first one concerns the
possibility of checking total brain death on the basis of the norms and tests now in use. What
they show is that brain death is a tale–tell symptom of the near brain death of the whole human
body. *Not* the death of the whole human body.

The first point was considered by two U.S. medical doctors, Robert Truog and James
Flacker, in a 1992 essay. According to these authors, proved scientific researches show that
patients who respond to current clinical criteria and neurological tests for brain death, do not
necessarily lose all brain functions. This proves that the complete cessation of these would not be
diagnosable on the basis of the standard tests in use. To support their theory, they showed: (1)
the endocrine-hypothalamic function of these patients does not fail, even after they were declared
in brain death according to the tests then in use; (2) a weak electrical activity is demonstrated in
many of these patients--this activity is concentrated in some areas of the cerebral cortex, and it is
destined to stop after 24-48 hours; (3) Some patients unexpectedly go on responding to the
external stimuli, as the rise in heart rate and in blood pressure after the surgical cut to excise
organs sows--these observations refer to patients declared brain dead on the basis of only clinical
British criteria, which refer to the brainstem condition); (4) many patients declared brain dead
still have spinal reflexes. Therefore one cannot rule out lower brainstem involvement in spinal
marrow activity.

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On the basis of a careful analysis of these elements the two authors came to the conclusion that current clinical means do not and cannot prove the cessation of all functions of the entire brain, but only of some, and at most they can diagnose only cortical death.20

The second point has been illustrated above all by D. Alan Shewmon, an authoritative American neurologist, who changed his mind during his career; at first strongly supporting brain death and then becoming one of the most prominent opponents of the theory. His critique is based on empirical examinations of many patients declared brain dead but who nonetheless grew, spontaneously healed minor infections from within, etc.


These authors reject the “neurological criterion,” as we have seen, and Shwmon’s empirical studies are regarded by many as perhaps the strongest scientific evidence demonstrating the demise of the claim that a human person is dead if there is irreversible cessation of the functioning of the entire brain, including the brain stem.

But they both hold that it would be a mistake to conclude that rejection of the “brain death” criterion automatically entails the end of vital organ transplantation from the (still-living) bodies (=persons) of those deemed brain dead. Shewmon, for example, asks, “What if…in a very particular circumstance it were possible to remove unpaired organs, including even the heart, from a live donor without causing or even hastening death?” He then goes on to suggest that this is possible and to outline the procedures to be followed.

20 See [http://www.brainharmony.org/neuroethics.html](http://www.brainharmony.org/neuroethics.html) where Shewmon lists publications and public presentations of his writings on “brain death”

21 See footnote 19
Here it seems best to cite in full Shewmon’s proposal. He writes as follows:

Consider a patient on morally extraordinary (disproportionate) life support (typically a ventilator), who is about to have that support licitly withdrawn and; who, independent of that decision, also wants to donate organs. Suppose also a high probability that the patient will die very quickly upon termination of that support. Instead of the withdrawal taking place in the intensive care unit, however, it is done in the operating room with surgical teams poised. Perhaps, with the patient’s consent, arterial catheters have been placed in readiness to perfuse at an appropriate time the organs of interest with a cold ischemia-protective solution. The life support is then discontinued and asystole awaited. After a brief interval (short enough not to damage the transplantable organs but long enough for moral certainty that spontaneous recovery will not occur) the organs of interest are perfused and the surgical teams begin their work.

In such a scenario, the patient would probably not yet be dead at the moment of organ removal. Cardiopulmonary resuscitation could be successful, but it would constitute an extraordinary means that has been decided ahead of time to be legitimately foregone. In the absence of circulating blood, however, “vital” organs are no longer vital, including even the nonbeating heart; their mere presence in the body contributes nothing to the body’s physiological integrity or remaining brief span of life (perhaps on the order of tens of minutes); therefore, their removal would neither cause nor even accelerate death. It is generally accepted that healthy individuals may licitly donate a single kidney or a piece of liver on the dual basis that (1) the functional integrity of their body is not compromised and (2) the gift of life for the recipient sufficiently justifies the risks of surgery and the structural mutilation. The retrieval of unpaired vital organs in the manner described above would seem to be morally equivalent, at least in principle, to these classic examples of licit live donation.\footnote{“Recovery from ‘Brain Death’…,” 82. In “Brainstem Death, Brain Death and Death,” 128-129 Shewmon elaborates on this proposal.}

Shewmon believes that this approach to transplant surgery merits further research and he encourages such study and research “in order to reassure the transplant community that the conceptual demise of ‘brain death’ would not necessarily entail the demise of organ transplantation, although it would surely require a radical change in the \textit{modus operandi} for obtaining donor organs.”\footnote{“Brainstem Death, Brain Death and Death,” 129. See also his “’Brainstem Death,’ ‘Brain Death,’ and Death: A Critical Re-Evaluation of the Purported Evidence,” \textit{Issues in Law and Medicine}, Vol.14, no.2 (1998). 125-145.}

Truog holds the same position.
But Shewmon, in his “Dead Donor” essay, adds the following caveat:

The foregoing discussion does not [emphasis added] constitute advocacy of any particular transplantation protocol. It addresses the very precise and limited question of whether it is possible in principle to remove vital organs without causing or hastening death or violating the time-honored injunction primum non nocere. My conclusion is yes, it is possible in principle. But before deciding whether it would be prudent to put this principle into practice in today’s society, many other factors, which are outside the scope of this paper, must be considered, such as whether donor consent can be guaranteed to be truly informed and free; whether, in the case at hand, apnea off life support can be predicted with medical and moral certainty; whether such eviscerating procedures respect human dignity even if they might not cause or hasten death, whether the risk of public misperception that this is utilitarian killing can be minimized and so on. If the answer to one or more of these “whethers” is a “no,”... then it behooves us to hold off implementing the otherwise intrinsically ethical procedure until all the circumstantial details are worked out [emphasis added].24

4.. The Position of Edmund D. Pellegrino, M.D.

Pellegrino, an internationally recognized and respected bioethicist, was Chairman of the President’s Council on Bioethics when it prepared and released its famous “White Paper,” Controversies in the Determination of Death (December, 2008). In his own personal statement

Pellegrino summarizes the Council’s "White Paper” in this way:

Loss of somatic integration of the organism as a whole as a result of brain death was proposed nearly thirty years ago by the then-President's Commission. In recent years, this criterion has been cast into doubt by a long series of clinical observations. A list, from the work of neurologist Alan Shewmon, is presented in Chapter Four of the white paper. Strenuously debated in the past, the criterion of somatic integration enjoys waning support today….The Council’s white paper [Leon Kass, former Chairman of the Council, was key in its new formulation of a definition of death] offers a more attractive philosophical argument, i.e., loss of the capacity by the apneic patient for active spontaneous engagement with the environment [my emphasis] through the function of breathing. The patient lacking this capacity is said to be “dead,” even if respiratory function and cell metabolism are sustained by mechanical ventilation because they are not, then, the result of “spontaneous” respiration. However, other patients kept alive “artificially”—by pacemakers, defibrillators, vasopressors, ventricular assist devices, artificial nutrition and hydration, etc.—are not, by that fact alone, considered to be ‘dead.’ Patients with respiratory paralysis due to poliomyelitis or cervical spine transsection have lived with the assistance of respirators for many years.

The possibilities of organ transplantation require us to shorten the time for observation/deliberation in the interests of preserving the vitality of organs to be transplanted. We must declare a donor to be dead as soon as possible, by one or the other of two standards, both subject to increasing uncertainty about their validity. Pellegrino thus considers the comparative reliability of the neurological and the cardiopulmonary standards.

He says that the “Dead Donor Rule” “has been the anchor for the moral and social acceptability of organ transplantation protocols from their earliest days.” Its first demand in any ethically legitimate transplantation protocol for retrieving organs from non-living, healthy donors, is to have certainty that the donor is dead, nor can his death be hastened or end of life care compromised in any way. Pellegrino then notes serious failures to observe the DDR, several involving infants.

He then asks, “Which standard should be preferred—the neurological or the cardiopulmonary? Pellegrino considers the objections leveled against both. He concludes: “Taking everything into account, I believe that…with the cardiopulmonary standard there is a higher degree of certainty of death than there is with a heart-beating donor, because heart, lung, and brain have all ceased functioning.”

Having said all this, he then asks whether transplantation of vital organs from non-living donors can be ethically acceptable and, if so, under what conditions? This, he says, is a matter of prudential or practical reasoning. “How can we act ethically in the face of relative clinical doubt?” Although we may not, at present, have absolute certainty that the “donor” is dead,” a sufficient degree of moral certainty to warrant such an action may be attainable if the requirements for prudent decision-making are satisfied. But what does this entail? Pellegrino’s answer to this very difficult matter, it seems to me, is following:
Relative moral certitude does not substitute for scientific certitude. But, properly weighed, it can give a legitimate warrant for necessary action in the face of unavoidable uncertainty. This is the situation within which ordinary decisions in daily life are made. Clinical prudence seeks to avoid both the error of inaction, which would deprive the recipient of a needed transplant, and the error of premature action, which would deprive the donor of life. Fidelity to beneficence and the prudential approach to decisions aim to avoid both the paralysis of inaction and the harmful use of ineffective medical treatments. Prudence must not be confused with self-protective cowardice. It is the decision to act for a good end in the morally optimal way despite persistent uncertainty about the outcome.

Much as I respect Pellegrino, I find this account unacceptable. For instance, how is “relative moral certainty” to be “weighed”? It is not some quantifiable like a pound of butter or a liter of gasoline, nor is there some common denominator to which it and something else can be reduced, nor can it be some kind of feeling. There must be some reasons why moral certainty that a person is dead is possible. Pellegrino is himself, I believe, aware of this, and he addresses the matter in a section of his essay called “Futility in the Decision Process.” There he writes as follows: “Clinical futility is present when any medical intervention is: (1) ineffective, i.e., unable to change the natural history of a disease or its trajectory towards death; (2) non-beneficial, i.e., unable to satisfy any good or value perceived by the patient or his or her surrogate; and (3) disproportionately burdensome to the patient, physically, psychologically, or financially. Balancing the relationship among those three criteria is at the heart of prudent, precautionary, and proportionate action. This formulation accommodates the physician's expertise with respect to effectiveness and the patient's values with respect to benefits, and it results in shared decision-making regarding the proportionality of benefits and burdens.” But I am still not satisfied. But it is possible that I have not properly understood Pellegrino’s position and am not being fait to him. If so, I apologize.

Pellegrino’s personal reflections continue with reflections on the need always to care for the patient, the value of palliative care, and on remaining ambiguities and problems, but the
essence of his reflections on the inadequacy of the neurological criteria and preference for the cardiopulmonary criteria have been set forth.\textsuperscript{25}

5. The Position of Nicanor Giorgio Pier Austriaco, O. P. Ph. D. S.T.L

Austriaco, Ph.D (in Biology from Massachusetts Institute of Technology), S. T. L. (from Dominican House of studies, Washington, D. C.), teaches biology at Providence College, Providence, R.I. He endorses the devastating criticism of the “neurological criterion” mounted by Shewmon and others. Austriaco holds that the only real sign of the death of a human person is the loss of the human organism. “An organism,” he writes, “can be defined scientifically as a discrete unit of living matter that follows a self-driven, robust developmental pathway that manifests its species-specific self-organization….An organism’s organization gives it its ability to live and to grow in a species-specific manner. Thus, the signature sign for the presence or the absence of the organism, and thus the presence or absence of its life is the presence or the absence of its organization, its bodily integrity.”\textsuperscript{26}

This is Austriaco’s basic argument. Much of his essay, however, is devoted to a critique of what he refers to as the “Radical capacity for sentience” (RCS) argument. This argument, he claims, is opposed to a realistic, scientific, Thomistic anthropology or understanding of the human person as a bodily organism of a specific kind. He maintains that “anyone who accepts the logic of the radical capacity for sentience argument he embraces must also endorse the brain

\textsuperscript{25} http://bioethics.georgetown.edu/pebe/reports/death/index.html

stem and the neocortical definitions for death, putting the lives of the most disabled of neurologically disabled patients at risk.”

I maintain that Austriaco misunderstands the so-called Radical Capacity for Sentience argument. A brief presentation of that argument and its purpose is given in the last, section of this paper.


Their position was originally advanced at a “Scholars’ Forum on Brain Death” in Washington, D.C. April 1-11, 2008, devoted to Shewmon’s work. He was present and actively participated in the discussions. Although a few rejected his critique of the neurological criterion, a majority of those in attendance accepted it. But some of us, led by Grisez and Ryan and Lee, argued that the entities Shewmon claimed were human persons who survived brain death, e.g. T. K., a Japanese boy declared brain dead when he was several months old, lived until he was 19, were in fact not human beings.

Why? Our argument can be summed up as follows: A human being is a rational animal. An animal is a sentient organism. In human beings and other mammals, sentience includes such functions as seeing, hearing, feeling pain and pressure, perceiving, imagining, remembering, desiring, fearing, being angry, etc. Embryonic mammals do not actually perform such actions but they have within themselves the resources to develop themselves so that they do have this capacity. Since embryonic mammals have the resources – the genetic and epigenetic composition and structure – to actively develop sentient capacities for themselves, they too are sentient organisms. The rationality that differentiates human beings from other animals includes such functions as conceptual thought, reasoning, and making deliberate choices. An organism that has the capacity for these types of actions is a human individual. Human embryos and fetuses are
human organisms because they too have the internal resources to develop themselves to the stage where they will be able to perform the actions characteristic of the human kind. But the organisms that Shewmon identified as living human persons who have survived brain death, e. g., TK, is therefore not a mammalian, let alone a human organism.

But Austriaco objects that our argument is falsified by sound biology. Biologically, not only the brain, but other parts of the nervous system are necessary for a mammal’s sentient functioning, and the death of the organism involves the loss of the nervous system as a whole, not only of the brain. Our objection is that total brain death is not a sound criterion for the death of a mammalian organism. The premises are true but the conclusion does not follow. An organism loses the capacity for a function if it irreversibly loses any part of what is necessary for that function. Therefore, if some parts of a mammal’s brain are necessary for its sentient functioning, then its irreversible loss of its whole brain entails the loss of its radical capacity for sentient functioning, and its death necessarily follows from the loss of its whole brain or of whatever part of its brain is necessary for the capacity for sentient functioning.

He further claims that our argument proves too much if it proves anything. One step in that argument is the proposition that the complete loss of specifically human capacities is a substantial change, namely, the person’s passing away. It is obvious, however, that before some people die, many completely and irreversibly lose their specifically human capacities –their capacities for reasoning and making free choices. Yet such people plainly are not dead. Although their neocortex is not functioning, they are nonetheless living human persons alleged to be in the “vegetative state.” Thus, unless it is shown beyond reasonable doubt that someone has lost the capacity for any sort of consciousness, one cannot be sure beyond reasonable doubt that the individual has lost the capacity for specifically human functioning. Therefore, our claim that the
total loss of specifically human capacities is a human being’s passing away does not warrant treating such individuals as nonpersons.

Our position does not lead to the conclusion that everyone who is unconscious and will never regain consciousness is already dead. It means that the loss of the capacity for consciousness is death. When a patient still warm and pink and breathing is in question, we admit that death has occurred when, and only when, it is shown beyond reasonable doubt that there no longer is any capacity for consciousness.

Patients confidently judged to be unconscious after careful and repeated examinations have sometimes later told about undergoing those examinations. The immediately exercisable capacity to respond to stimuli is one thing; consciousness is another. Thus, to establish beyond reasonable doubt even the fact that a patient is unconscious is far more difficult than is generally supposed. Pathological unconsciousness is one thing; the loss of the capacity for consciousness is another.

Thus our argument does not lead, as Austriaco charges, to an endorsement of neocortical death nor does it put the most vulnerable in our society, e.g. people in the called “permanent” vegetative state at risk of life. It does not because our position is grounded in the Thomistic principle that “nothing is in the mind (an immaterial faculty, not a material one to be identified with the brain) that has not been some way in the senses.” The human intellect, unlike the divine and angelic, is a faculty of a being who is a composite of soul and body—and the body is integral to the being of the human person. For us to form concepts, make judgments, reason (intellectual acts) we must first “separate” or “abstract” forms present in our sensory powers, the external senses of sight, hearing, touch, smell, taste, and the “internal” senses of imagination and memory or what Aquinas called the vis cogitative, the “cogitative power.” But as long as we have a
composite being made of spiritual soul and body (made alive by the soul or animating principle) we have what Austriaco calls a living human organism. His critique is misplaced. 27

Nonetheless, as Grisez and Lee say explicitly at the conclusion of their essay, “the present paper has been concerned exclusively with the adequacy of total brain death as criterion for the death of a human individual. The judgment that this criterion – or any other criterion – of death is met is an entirely different matter. Nothing that we have said should be mistaken as supporting the adequacy of the procedures that have been used in pronouncing patients brain dead.”28

Conclusion

The summary presented here of contemporary debates and discussions shows, I am convinced, that the best scientific and scholarly studies demonstrate as false the claim that a human person is dead if the functioning of the entire brain, including brain stem, has been irretrievably lost—the neurological criterion/criteria. The brain is not, as those defending this claim insist, the primary integrator of the entire human body. A more holistic criterion has been developed to demonstrate that the human organism is dead, and it is only when there is moral certain that a person has really died that his/her corpse can be buried, cremated or vital organs can, with proper consent, be excised from his/her body and transplanted into the bodies of persons in need of them.

27 Germain Grisez and Patrick Lee, “Total Brain Death: A Reply to Alan Shewmon,” Bioethics ISSN 0269-9702 (print); 1467-8519 (online) doi:10.1111/j.1467-8519.2010.01846.x, Volume 26 Number 5 2012 pp 275–284. In my judgment Mortimer Adler’s 1968 book, iThe difference of May and the Difference It Makes, i is a very good presentation of the difference between what he calls “perceptual thinking” (e.g., our imagining a dog, and in doing so imagine a dog of a certain color, size, etc), and a concept (a mental construct that is universal and capable of existing only in a non-material faculty of the human animal, and not in the brain of an subhuman, non personal animal. It requrires within the entitative make-up of human animals, a non-material faculty, the mind, which includes its cognitive dimension, intellect, and its choosing dimension, freedom of will.

28 Ibid., 284.
Do Catholic scholars who, in light of new scientific evidence, dissent from the teaching of Pope John Paul II and must be regarded as disloyal Catholics? As I have argued elsewhere, after carefully examining relevant passages in Vatican Council II’s Dogmatic Constitution on the Church *Lumen Gentium*, in particular number 25, on the obligation to give religious submission of will and intellect to teachings proposed by the Roman pontiff authoritatively but not irrevocably and definitively (i.e., *ex cathedra*), and also to John Pau’s insistence that competence for determining criteria to show that a person has died is one within the competence of scientists and doctors, *not* popes or bishops, I concluded that today Catholic scholars and doctors who reject the neurological criterion for a more holistic one are not acting in a disloyal way.

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29 See my article “Responding to Teachings Proposed for Determining that a Person Has Died,” *Fellowship of Catholic Scholars Quarterly*, Vol.34, No. 1 (Fall, 2011) 17-20. See note to that article and citation from Ref. Gonzalo Miranda. Dean of the School of Bioethics at the Ateneo Romano della Regina Apostolorum.