The diagnosis of death and the irreducibility of the human person¹

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If, as Karol Wojtyla had insisted, the human person is fundamentally irreducible to any natural, biological, social, or even cosmological function, then the diagnosis of death on any of the purely functionalistic grounds available to medical science presents a serious ethical problem. Perhaps we can no longer treat the question of death merely as a medical “diagnosis,” regarding, on that basis, the appropriateness of organ transplantation as a purely medical judgment, ethically accountable only to professional standards of care. We will explore this problem from within a personalistic philosophical, and theological framework, according to which the irreducibility of the human person provides the central referent for an analysis of the reductionistic tendencies of contemporary thinking concerning the “diagnosis of death.”

Keywords: brain death, reductionism, irreducibility, person, diagnosis of death

Strictly speaking, the question of death is really, of its nature, a philosophical and theological matter, for it deals with the question of what *is* and *is not* a personal somatic presence. A judgment is made, in the determination of death, whether *this thing here*—this organism—is, in fact, a *someone* (or, as Martin Buber would say, a *du*²). This is a fundamentally ontological judgment. As such, it marks the point at which the medical doctor has reached the limits of his or her competency. With the advances of medical technology, especially since the mid-twentieth century, this fact has gradually given rise to a serious methodological paradox. Because medical doctors can now intervene in, and even reverse, a trajectory of physical decline that would otherwise lead rapidly and inexorably to death, it has fallen to them to judge when death has finally occurred. Medical doctors are called upon to

intervene as the human person approaches death, such that we have come, intuitively, to regard them as the competent authority in the determination of the *fact*, itself, of death. In the past several decades, even the magisterial authority of the Catholic Church has tacitly, if not explicitly, accepted that the determination of death is a medical question rather than a theological one.³ Death thus emerges, in our consciousness, as a clinical condition subject to medical diagnosis, and the question of *what it means to be a human person* is gradually transmuted from an *ontological* question into a *physiological* one, leading, by degrees, to a loss, in our consciousness, of a sense of the person as an irreducible whole and an incommensurable value. As we begin to explore this problem and where it leads, let us begin by situating in the context of today’s bioethical debates over the ethics of organ removal and

transplantation, the initial conceptual shift from thinking of death as an ontological fact to thinking of death as a diagnostic determination.

ONTOLOGICAL IMPLICATIONS OF TREATING DEATH AS A CLINICAL DIAGNOSIS

The shift from an ontological to a physiological assessment of the human being seems almost inevitable on the current model. But the threat posed to the irreducibility of the human person by treating death as a medical diagnosis is not rooted, actually, in the mere admission of medical practitioners to the dialogue about death and the determination of death on the merits of the advancements of medical technology. Rather, it is rooted in the exclusion of all other interested parties from that dialogue in the face of medical science's assertion of unitary authority on the question. The province of medical doctors is entirely that of biological functionality, not ontology, and this fact carries its own ontological implications in the absence of other interlocutors; for when a single methodological approach to a problem asserts itself as the only one, the result is a narrowing of the horizons of our thought concerning the problem in question. Evidence and models of thought are disallowed as methodologically irrelevant, eventually non-rational, and, finally, false. By vesting medical practitioners with the unitary legal authority to "diagnose" and pronounce a human being "dead," understanding that contemporary medicine operates within a limited, bio-mechanistic paradigm, contemporary Western society has institutionalized, however inadvertently, the reduction of the human person to a naturalistic, biologicistic function.⁴

Of course, medical practitioners are the most competent among us to determine

that the body is dead; and we would have to acknowledge, from within a Catholic anthropology, that a living body is a necessary condition for the presence of human life. On this level, it does make sense to rely upon medical judgment in the determination of the death of the human being. But when, in an absence of the contributions of philosophers and theologians, the paradigm upon which the medical practitioner relies in rendering a diagnosis rests increasingly upon materialistic and mechanistic metaphysical presuppositions, the tendency will be to substitute a collection of functioning parts for the integrated and irreducible whole, leaving the "person" to appear as a mere epiphenomenon resulting from the complex of interactions between chemicals, tissues, organs, and systems. Indeed, this sort of reductionism, in its many forms, is the fundamental problem in many contemporary bio-ethical debates, from embryonic stem-cell harvesting and abortion to euthanasia for patients in the Persistent Vegetative State and the ethics of organ transplantation.⁵ But if, as Karol Wojtyła/John Paul II had insisted, the human person is fundamentally *irreducible* to any natural, biological, social, or even cosmological function,⁶ then the diagnosis of death on any of the purely functionalistic grounds available to medical science presents a serious ethical problem when it comes to our treatment of the body immediately after the determination of death. The problem is not, of course, that patients die, nor, precisely, that medical doctors declare, as a measure of their own professional competency, that they can offer no further intervention to prevent this outcome. Rather, the problem arises when the physician attempts to pinpoint the moment at which the *medical* patient has ceased to be a *moral* patient. Because, today, we have essentially equated the medical *diagnosis* of death with the

ontological *fact* of death—or, as we have said, reduced, in thinking and practice, the ontological fact of death to a purely physiological matter—we have tacitly accepted the assumption that *moral* patency⁷ is co-terminous with *medical* patency.

Again, this assumption rests upon fundamentally reductionistic grounds and, thus, represents a problem of great concern for philosophy and theology. Indeed, it is a problem which *must* be addressed in the light of society's increasing acceptance of the practice of organ transplantation from "deceased" donors. For if the human person is more than mere bio-physiological functionality, it is entirely possible that medicine is simply unable to pronounce upon what, in traditional Christian parlance, we would describe as, "the final separation of the soul from the body."⁸ And if that is so, organs may be harvested from patients who are not, in the strict philosophical and theological sense, actually dead.

THE IDENTIFICATION OF "TOTAL BRAIN DEATH" WITH "DEATH OF THE HUMAN BEING" DOES NOT CONSTITUTE CHURCH TEACHING

Among Catholic thinkers, there is now emerging wide disagreement about the use of the standard of Total Brain Death as an adequate determinant of actual death.⁹ This is a cause of great confusion, because the Church has preliminarily accepted the standard and, on the assumption of its adequacy, officially taught that, "Organ donation after death is a noble and meritorious act and is to be encouraged as an expression of generous solidarity."¹⁰ The Church's acknowledgment of the legitimacy of organ donation and transplantation is predicated, however, upon the caveat that, "it is not morally admissible directly to bring about the disabling mutilation or death of a human being, even in order

to delay the death of other persons."¹¹ Indeed, we should note that the Church's approval of even the neurological criteria for determining the death of the patient is, as we have said, provisional. Here, the position of the Church is commonly misrepresented. In his well-known and ubiquitously quoted, "Address to the 18th International Congress of the Transplantation Society," John Paul II does not say, without qualification, that these criteria are sufficient to ascertain the fact of death. Rather, he says:

In this regard, it is helpful to recall that *the death of the person* is a single event, consisting in the total disintegration of that unitary and integrated whole that is the personal self. It results from the separation of the life-principle (or soul) from the corporal reality of the person. The death of the person, understood in this primary sense, is an event which *no scientific technique or empirical method can identify directly*.¹²

Only at this point does John Paul II go on to offer a form of tentative approval of the neurological criteria. He says:

Here it 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, if rigorously applied, does not seem to 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 judgment which moral teaching describes as "moral certainty."¹³

We should note, at this point, that moral certainty is an *existential* condition, not a strictly *epistemic*¹⁴ one. The possibility of factual error perdures, even in the face of moral certainty. Moral certainty

indicates, merely, the point at which the human agent has dealt responsibly with the available evidence, as far as it can go, and has arrived at a judgment consistent with that evidence sufficiently honest to release the agent from culpability, in the event of error, in the performance of the moral act he or she is about to undertake. John Paul II goes on to say, on this point, that:

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.¹⁵

Ironically, Magisterial judgment on this point cannot be considered definitive, precisely because, as both Pius XII and John Paul II have insisted, the determination of the fact of death, "does not fall within the competence of the Church."¹⁶ John Paul II says, "the Church does not make technical decisions. She limits herself to the Gospel duty of comparing the data offered by medical science with the Christian understanding of the unity of the person, bringing out the similarities and the possible conflicts capable of endangering respect for human dignity."¹⁷ This statement can only mean that John Paul II's own "moral certainty" surrounding the neurological criteria is second-hand—he cannot, from the Chair of Peter, competently arrive at this certainty except by granting that the medical diagnosis of "complete and irreversible loss of brain function" can, in fact, be ascertained, scientifically.¹⁸ What is more, the risk persists that measures of organ function, no matter how certain in and of themselves, still do not suffice as a scientific indicator of the death of the person. With respect

to this sort of problem, John Paul II goes on to say:

In addressing these varied issues, *the contribution of philosophers and theologians* is important. Their careful and competent reflection on the ethical problems associated with transplant therapy can help to clarify the criteria for assessing what kinds of transplants are morally acceptable and under what conditions, especially with regard to the protection of *each* individual's *personal* identity.¹⁹

RETHINKING THE IDENTIFICATION OF "TOTAL BRAIN DEATH" WITH "DEATH OF THE HUMAN BEING"

Ironically, while Pope John Paul II is routinely invoked by Catholic moralists in defense of the neurological criteria, it is precisely on the basis of his own philosophical anthropology that one is led to doubt that these criteria can ever be sufficient to determine the death of the person.²⁰ Of course, some Catholic bioethicists would consider this statement "irresponsible," again, on the presumption that the irreversible cessation of all brain function makes the death of the person scientifically certain.²¹ This certainty, however, is based upon two presuppositions, neither of which enjoys, in itself, the degree of certainty attributed to their conclusion; and that fact makes for rather poor argumentation. First, the neurological criteria presuppose that *irreversibility* of brain function can be empirically observed within any time-frame that would allow for the relevance of the present debate—in time, that is, to prevent the decay of other body tissues so that viable organs can be harvested for transplantation. Second, the neurological criteria presuppose that the integrity of the brain itself is, in fact, the single unifying condition necessary for human life. Again,

these two difficulties remain, even where it may be possible empirically to verify that the brain, at a specific moment, is entirely without function in these patients. Whether or not such determinations are even genuinely possible is a separate question, but not one relevant to our own discussion.²²

A great deal could be said concerning both problems—that is, the problem of observing irreversibility and the problem of identifying a single unifying factor in a particular bodily organ. We will concern ourselves, however, with the second problem: that of locating personal identity in the functionality of the brain itself, as the mediating organ between soul and body. In his article, “Death and the Determination of Death,” Albert S. Moraczewski, O.P., states, boldly, that:

On the medical level, the current problem with the brain-related criteria has more to do with the technical procedures employed to make the determination of brain death, than with the philosophical question as to whether the death of the brain is the same as the death of the person. ...

In brief: death of the total brain, including the brain stem, is death of the individual because there no longer is present a human organism (which depends on the integrating function of the brain). The ultimate integrating factor of the human being is the soul, which uses the brain as an instrument for this purpose. If there is no human organism, then there is no person; the person is dead (Moraczewski 2001).

Moraczewski’s treatment of this question, with which Benedict M. Ashley, O.P., and Kevin D. O’Rourke, O.P., appear to agree (Ashley and O’Rourke 1997²³) is not only clearly reductionistic but based upon a demonstrably errant biophysiological presupposition as well. It

may be true that there exists a strong link between the function of at least some part of the brain and the long-term biological survival of the organism. But brain-dead women have been known to give birth and produce milk (Kantor and Hoskins 1993; Feldman et al. 2000), while a brain-dead boy maintained homeostasis and underwent puberty in his fourteen-plus years of home care, with the aid only of a respirator²⁴—a treatment commonly afforded other non-dead patients, like those with acute high spinal cord injury.²⁵ These facts ought to be troubling to proponents of the total brain-death standard, because these functions ought to be impossible—given our current understanding of the human endocrine system—without a minimally functional brain.

More troubling still, however, from a philosophical and theological perspective, is the fact that Moraczewski’s proposal is tacitly dualistic in the hyper-Cartesian or Platonic sense, according to which the soul is understood as a distinct being, related to the body only as an occupant to a house or a pilot to a ship. This approach to the body–soul relationship is anthropologically inadequate because it fails to capture the fully “somatic” character of the human person, who exists not merely as “spirit” and “matter” but as “materially instantiated spirit” or “spiritually realized matter.”²⁶ For Moraczewski, however, “The ultimate integrating factor of the human being is the soul, which *uses* the brain as an *instrument* for this purpose.”²⁷ Perhaps this is nothing more than infelicitous language, but on the face of it, Moraczewski appears to suggest that the soul somehow *encounters* the body, and *inhabits* it through a specific organ (i.e. the brain) that allows it to pilot the body, rather than a soul that is immediately and equally present in all parts of the whole.²⁸ Moraczewski’s language raises the specter of a preexistent soul that enters the body

for a limited period of time, but which does not properly belong to the body. Of course, I doubt very sincerely that Moraczewski would actually support that assertion, it is only fair to say, but his own choice of words would seem to lead, conceptually, in that direction. The consequence can be that, in our eagerness to appropriate so much tissue and organs, we lose sight of the *person* whom we can only see by *receiving*.

The editorial summation appended to Moraczewski's article does not offer any corrective on these points. Instead, we read this astonishing assertion:

In the Catholic tradition, death is defined by the separation of the soul from the body. *Since* the soul is the organizing principle of an individual's existence, the brain *must* be the organ by which this organization is effected. Therefore, *if* it can be determined by neurological criteria that the entire brain is dead, the soul of the person must no longer be present and the person is dead.²⁹

It is easy to see that the editors have drawn a logically unwarranted inference from the major premise of their argument. It simply does not follow that *since* the soul is the organizing principle of an individual's existence, then, necessarily, *this particular organ* is the instrument by which the soul effects that organization. The conclusion, then, that if *this particular organ* is destroyed, the soul must no longer be present, represents an unwarranted leap in logic. As obvious as this logical point may be to the critical reader, the matter becomes still more complex when we distinguish between the unitary *event* of death and the *process* through which that event occurs. It may well be the case that the event of death occurs upon the final separation of the soul from the body, but at what point does this separation actually become final? We do not mean, here, to introduce the problem of

miraculous resurrection, as in the case of Lazarus,³⁰ for example, because such cases are already recognized as contravening the laws of nature. Our concern is with cases in which a separation between soul and body has appeared probable through indirect clinical criteria, only to be overcome at a later time, apparently within the order of nature.

Here, the fact of so-called "near-death experiences" raises very serious questions. Because these experiences are known in all cultures,³¹ whatever theories may be advanced to explain them, it would be academically and scientifically dishonest simply to dismiss these experiences out-of-hand. That said, these experiences call into question whether the soul leaves the body quite as abruptly as we are customarily inclined to imagine. In any event, the distinct possibility that the soul does not leave the body immediately means that assertions such as, "death was instantaneous," have no basis at all outside a reductionistic paradigm that we cannot accept from within a Catholic frame of reference.³² We might pause to question, then, from a theological point of view, whether immediate disembowelment might prematurely alienate the departing or dithering soul from the body—that is to say, from its own corporeity—in effect, killing the patient by precluding psychosomatic reintegration.

At this point, it would be useful to return to the question of "irreversibility" to remind the reader of a foundational principle in Catholic moral thinking that can escape our attention in the face of the seeming futility and wastefulness of the fallen and suffering world. Circumstances do not alter the substantial moral structure of an act—some acts are evil in themselves, no matter the circumstances under which they are performed.

Leaving aside, therefore, the practical fact that there can be no empirical method

by which irreversibility can be directly determined—only inferred—we can grant, for the sake of argument, that a patient’s clinical condition is, in fact, irreversible. This fact would have to be distinguished, nonetheless, from the actual ontological question about whether the soul and the body had yet been disintegrated from one another, definitively—whether, that is, the patient has actually died. The imminence of one’s death in terms of minutes or even seconds constitutes only a *quantitative* difference between that person and those who will die many decades later, not a *qualitative* one. If we accept, as we must from within a Catholic frame of reference, that it is always and everywhere wrong to kill the innocent intentionally and directly, we will immediately have our answer as to what we may or may not do in the face of imminent death. We will have to recognize that a patient’s severe neurologic impairment and rapidly declining health, and someone else’s need for replacement organs, are all circumstances, and, thus, as the Scholastics would say, “accidental characteristics” of the act of removing the patient’s organs, not the “substance” of that act.³³ If it is *always and everywhere wrong* intentionally and directly to kill the innocent, then it is wrong to do so even under these circumstances, in which our patient will not recover but will die very soon, even as another patient stands to benefit from whatever organs may remain viable upon the first patient’s death.

SOME RADICAL LEAPS IN REDUCTIONISTIC CRITERIA FOR ORGAN REMOVAL

All of these difficulties surrounding the mystery of death and dying in human beings, however, are amplified when we begin to expand our catalogue of “sufficient criteria” for declaring death. The more

medical technology advances, making it possible to transplant an increasingly wide array of tissues and organs, the more acutely sensitive medical professionals and medical ethicists become to the possibilities for life-saving and life-enhancing therapies that are lost to the limited availability of viable tissues and organs for transplantation. In this context, some have suggested that cardiac death suffices for the ethical removal of transplantable organs.³⁴ Again, in this case, personal presence is reduced to a purely biophysiological function. Yet, upon occasion, patients have spontaneously recovered after cessation of cardiopulmonary resuscitation. This so-called, “Lazarus phenomenon” or “Lazarus syndrome,” occasionally results in the patient’s rehabilitation and discharge from the hospital. “Lazarus syndrome” can manifest within a few seconds after cessation of treatment or, according to case reports, can be delayed for as long as twenty minutes (Adhiyaman, Adhiyaman and Sundaram 2007).³⁵ It is very difficult to see, in these cases, how the absence of a purely bio-physiological function can be equated with absence of a *personal* presence, since personal presence, and not only baseline biological function, is known to reassert itself, spontaneously after sometimes surprising intervals of asphyxia. In light of the facts, harvesting organs immediately after cessation of treatment cannot be considered ethical, since, again, true death—the separation of the soul (or the personal presence) from the body—does not appear to occur immediately in all cases. Indeed, since we know that true death does not occur immediately in all cases, and true death is not directly observable by any naturoscientific method, we have no naturoscientific basis for supposing that true death occurs immediately in *any* case.³⁶

Perhaps, however, the most grievous affront to the irreducibility of the human person in the diagnosis of death for the

purpose of harvesting viable organs comes in the suggestion that patients with severe neurological impairment, such as those in a Persistent Vegetative State, be considered for organ donation.³⁷ Advocates for this position can cite legal precedent favoring the denial of basic personal protections for patients with severe neurological impairment. On grounds of this sort of functionalistic reductionism, there appears to be a move toward the adoption of a new standard of what might be called, “personal death.” As John Paul II lay dying in 2005, for example, he pleaded for clemency in the case of Terri Schiavo, who, for all intents and purposes, had been sentenced to execution in the State of Florida for her failure to disclose her personal, conscious presence, to the satisfaction of the courts. While, organismically³⁸ speaking, she finally died of dehydration on March 31, 2005, her husband had her grave marker indicate February 25, 1990 as her date of death. In her husband’s judgment, Terri Schiavo had been dead as a person from the time of initial onset of her neurologic impairment. This act can only be justified on the basis of two possible options, neither of which is acceptable in the context of a Catholic anthropology. Either, that is to say, Mr. Schiavo must accept a dualistic anthropology, according to which he would acknowledge that his wife’s body remained alive as an integrated but sub-personal human organism while the personal soul had long since departed, or else he would have to accept a materialist reductionism, according to which the person is a mere epiphenomenon that, far from transcending the merely material realm, is entirely reducible to it, and can be definitively suppressed or annihilated by physical impairment. Again, Persistent Vegetative State (PVS) is not a condition that affects overall somatic integration, so those who are

prepared to equate PVS with the death of the person must opt either for a starkly dualistic anthropology, or else for a grossly materialistic and epiphenomenalist one. In either case, the consequence is a denial of relevancy to the fact of continued somatic integration and the undermining of our only empirically observable safeguard for the dignity of the irreducible person.

For thinkers such as Noah Sugerma, for example, the fact of somatic integration—that is to say, of biological life—is, indeed, morally irrelevant in the treatment of human patients. In his article, “Person vs. PVS: An Oxymoronic Bioethical Issue?” (Sugerma 2006) he advocates precisely for “personal death” absent organismic death, and that on purely functionalistic grounds. “PVS patients,” he explains,

would ... lose their classification as persons. As such, a patient in a persistent vegetative state remains undoubtedly *alive*, but they do not retain the moral or legal rights as a *person*—namely the right to life and those rights specified in the U. S. Constitution. (Sugerma 2006, 40)

Since, for Sugerma, PVS is morally equivalent to death of the person, other severe mental impairment would also mean an absence of personhood; and he is consistent in applying his standard to all similar cases. “In response to the slippery slope argument,” he explains,

diagnosis of an Alzheimer’s patient or a severely demented person as unaware and unconscious seems inevitable in the course of the disease. At some point, these people really *will* be comparable to living human beings in PVS, and once this lack of awareness is medically determined to be equivalent, they too will lose their recognition as persons. (Sugerma 2006)

FROM TOTAL BRAIN DEATH TO TOTAL MATERIALISM THROUGH OUR PREJUDICE TOWARD HIGHER THOUGHT

Given the unassailable data demonstrating that somatic integration can survive even the death of the whole brain, it is clear that the real basis for our cultural suspicion that the brain is the organ that makes us personal, is our awareness that personhood is closely linked to a capacity for a certain sort of consciousness, with which the brain appears to be associated. Those advocating for what we have here termed “personal death” in the absence of somatic death simply reduce personhood to this capacity. But in making this move, they are only following the implications of continued adherence to the Total Brain-Death standard to its logical conclusion. If the death of the brain does not, in fact, equate, strictly, to loss of somatic integration, continued adherence to this criterion for the determination of death must rest on some other specifically differentiating function dependent upon the brain. The only such brain-dependent function that differentiates human beings from other animals, specifically, is that of higher thought, such that, in the absence of higher thought, even where the brain is largely still intact, the organism would be “personally dead.”

In this moment, we can see that the classical Boëthian definition of the person—namely, that a person is, “an individual substance of a rational nature,”³⁹ disjoined from its original Christological context, now opens out to a serious distortion made possible on the basis of its incompleteness.⁴⁰ If, that is to say, our capacity for rational thought is tied to the brain, if rationality is the mark of personhood, then it does make sense to suggest that, absent the brain—or, for that matter, certain regions of the brain—personhood is precluded, even where overall

organismic or somatic integrity remains. Indeed, this was precisely the sort of reasoning that led the Scholastics to deny the personal status of the fetus until at least it had developed the sensory apparatus it would require to function as a rational being, seeking knowledge from its surroundings.

The mature mind of the Church appears, now, to reject this view. We would have to acknowledge, then, that it would be disingenuous to apply at the *end* of life the very same standard we had already rejected for the *beginning* of life. Returning to the charge that the incompleteness of the Boëthian definition is partly to blame for today’s reductionistic attitudes, we are reminded that Karol Wojtyła/John Paul II had already identified this problem decades ago. To be sure, Wojtyła does regard this definition as a basically correct metaphysical framework, but he considers it inadequate to the real problem of dealing with the person as a *subject*, and not merely as an *object*—as a *someone* and not merely as a *something*.⁴¹ For Wojtyła, the person is fundamentally *irreducible* to any mere function, even that of rational thought. Insofar as we move within the sphere of functionalism, therefore—as, indeed, we do on the basis of the brain-death standard—we will never capture the real essence of the person. In the application of this criterion, we run the risk, instead, of losing sight of the person altogether, just as Sugerman, Truog, and others have already done.

From a reduction of the person to higher consciousness rooted in the functioning of the intact brain, the next logical step is the reduction of the brain itself to its bio-chemical constituents. Indeed, with respect to this very point, Roger N. Rosenberg, in his article, “Consciousness, Coma, and Brain Death—2009” (Rosenberg 2009), editorializes on a passage from Francis Crick’s book, *The*

Astonishing Hypothesis (Crick 1994), not to confront him for *his* reductionism, but to join him in it. For his own part, Crick writes,

The Astonishing Hypothesis is that “You”, your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free-will, are in fact no more than the behavior of a vast assembly of nerve cells, and their associated molecules. As Lewis Carroll’s Alice might have phrased it: “You’re nothing but a pack of neurons.” (Crick 1994, 3⁴²)

Rosenberg responds in a way that takes us from the Cartesian dualism we criticized earlier, to the opposite and equally unacceptable extreme of total materialistic mechanism. He writes:

Crick’s point, directly stated, is that there is no separate mind from the brain, the mind is the brain. Cartesian logic of a separate mind and brain is an archaic philosophical concept displaced by current functional magnetic resonance imaging, DBS studies... [etc.], that have proven that consciousness and mind are embedded into specific neuroanatomical arousal and behavioral circuits. ... It is now clear that coma, consciousness, and cognition are neural-directed constructs and probably result from mathematical computations yet to be discovered.⁴³

There can be no question that by the time we arrive at Crick and Rosenberg, the *human person* has already died. He has been reduced, in a hyper-Humean manner, not simply to “a bundle of perceptions,”⁴⁴ but to “a bundle of neurons.” Even the brain itself has been deconstructed until we are left with a series of autonomic electromagnetic impulses.

PRACTICAL CONSIDERATIONS AND CLINICAL IMPLICATIONS

Perhaps this means that we can no-longer treat the question of the death of the person merely as a medical diagnosis, bound as it is to its purely biological and functionalistic paradigm. There is too much at stake—not simply this or that *organism*, but the very incommensurability of the person. There can be no question, of course, that abandoning appeals to functionalism in the diagnosis of death will have unfavorable implications for our ethical assessment of the practice of vital organ transplantation, but perhaps it is time for Catholic moralists to accept those consequences for, “the protection of each individual’s personal identity.”⁴⁵ For, “through the looking-glass” of Crick and Rosenberg, we find ourselves in an eerily familiar setting. We are wearing the clothes of Terri Schiavo, and wondering what quantifiable evidence will ever be enough to demonstrate our-*selves* to other minds, who will not “pause before the irreducible,”⁴⁶ and, so, cannot see the whole for the sum of the parts. On these purely biologicistic, functionalistic grounds, they will never know the truth for sure: that someone is before them—that *I* am before them—and that *I* am really, personally, and irreducibly *here* and *alive*.

We cannot, at this point, begin to advance a concrete, positive formulation as to what criterion for the determination of death would also suffice as a criterion for the removal of organs at a time when they might remain viable for transplant. But, at the same time, we cannot be driven by that agenda, as if our primary goal is to find increasing numbers of viable organs for transplant rather than to care for each person as an irreducible subject of unique and incommensurable value. We do not deny that, in principle, if we could, with certainty, determine that a donor has, in

fact, died, there would be no moral difficulty in removing the organs. At one time, it was widely accepted, even in Catholic circles, that Total Brain Death provided us that certainty, but as the evidence mounts and flows through the channels of dissemination, moral certainty on the basis of the Total Brain Death Criterion no longer appears as a viable posture. Even materialists with unapologetically secular values are abandoning it along with the increasingly inconvenient “dead donor rule.” Although Catholic moralists were not wrong about the basic moral principle that would make the removal of organs for transplant morally licit—that the donor would have to be dead before they were removed—many of us were wrong to make the practical judgment that Total Brain Death was a sufficient criterion for determining that the patient had actually died. Once again, we contend that the evidence is clear—Total Brain Death does not necessarily correlate with the death of the human being, as has been shown, and, thus it cannot be considered ethical to remove organs for transplant on the basis of that criterion. We should bear in mind that, given the difficulties introduced by the clinically observed cases of non-immediate death (e.g. auto-resuscitation after prolonged periods of asphyxia), we should be prepared for the possibility that it may not be possible ever to identify a criterion for determining the death of the human being in time to harvest viable organs for transplant.

ENDNOTES

1. This article is a revision of a paper initially presented at the conference “The Ethics of Organ Transplantation,” The Center for Thomistic Studies at the University of St. Thomas and St. Joseph Medical Center, Houston, TX, March 27–29, 2009.
2. Buber develops the idea of interpersonal encounter and valuation throughout the body of his work, but most thoroughly in his work *I and Thou*, originally published in German under the title, *Ich und Du*. The German term *du* is untranslatable into English, because we have no equivalent pronoun. The German *du* indicates something akin to *you-my-beloved*, or *you-my-dear*. The contrast between the *I-It* or *Ich-Es* and *I-Thou* or *Ich-Du* relations comes across to the reader in much starker contrast in Buber’s original text than in any English translation. See, Martin Buber, *Ich und Du* (Gütersloh: Gütersloher Verlags hauses, 1983). For an English translation, see Buber (2000).
3. Pius XII, in his, “Address to an International Congress of Anesthesiologists” (November 24, 1957), declares that, “It remains for the doctor, and especially the anesthesiologist, 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.” See Pius (1957). In this allocution, Pius XII is not addressing the question of the death of a person who is still conscious, but the question immediately arises, nonetheless, since the transition into death always involves an eventual loss of consciousness—at least, that is to say, a loss of consciousness through the body. Thus, later magisterial statements do not include any caveat on this matter. Pope John Paul II simply states that, “The Church does not make technical decisions” (John Paul II, “Address to the 18th International Congress of the Transplantation Society” [29 August 2000], n. 5), and considers the health-worker as, “professionally responsible for ascertaining death” (ibid.).
4. In the United States, regulations governing the pronouncement of death fall under the jurisdiction of the individual States, and regulations vary. Typically, these regulations restrict the pronouncement of death to a physician, medical examiner, or coroner. Increasingly, Registered Nurses are being granted such authority in clinical settings, where they are under supervision by physicians, such as in hospital and hospice settings. Still, there are legal standards designating the pronouncement of

- death as a clinical assessment or medical diagnosis, which only certain medical practitioners are given license to perform. Such professionals are, thus, provided legal protections in the exercise of this judgment that lay actors would not enjoy under the law.
5. In each of these cases, the moral problem is typically framed in terms of bio-physiological functionality. Such criteria include viability, sentience, and intellection. We ask whether what stands before us is an integral organism or merely a mass of tissue, and whether, if it is an integral organism, it might not qualify as a bearer of rights or a moral patient in any sense, and attempt to answer these questions on the basis of bio-physiological criteria alone.
 6. See Wojtyła (1993, 1988). This essay, pivotal for any real understanding of Wojtyła's broader philosophical views, originally appeared as, Karol Wojtyła, "Podmiotowsci I "to co nieredukowalne" w czlowieku," *Ethos* 1.2–3 (1988): 21–28. According to the editorial notes appended to the translation, this paper is considerably earlier than its first publication would suggest; Wojtyła sent it to a conference in Paris held June 13–14, 1975. Beyond the date of the conference, no further specifics of the event are provided. See also Karol Wojtyła, "The Problem of Catholic Sexual Ethics: Reflections and Postulates," in Karol Wojtyła, *Person and Community*, 279–299, in which he attempts to move from an Aristotelian/Thomistic naturalistic and teleologicistic account of sexual ethics to a personalistic and normative one. This article was originally published as Karol Wojtyła, "Zagadnienie katolickiej etyki seksualnej: Refleksje i postulatory," *Roczniki Filozoficzne* 13.2 (1965): 5–25.
 7. In philosophical terminology, "patency" refers to the condition of the patient *as* patient, where the term "patient" is taken in its original broad and literal sense, as *one who receives the action of another*. We possess "medical patency" insofar as we are the recipients of medical acts—i.e., when we become medical patients. We possess "moral patency" insofar as we are the recipients of moral acts—that is to say, insofar as we have moral worth that constitutes a relationship of obligation for moral agents who become conscious of our presence to their actions. We contend that a subject may be a moral patient without being a moral agent, just as a subject may be a medical patient without being a medical agent; but, as we will see in the course of this paper, moralists are increasingly coming to reject this view—a fact linked directly with reductionistic presuppositions about personhood.
 8. Pius XII, "The Prolongation of Life," 396. Cf., also, *Catechism of the Catholic Church*, n. 1016.
 9. Most notable among these thinkers is neurologist D. Alan Shewmon, who, in 1998, published a shocking critique of the equation of "brain death" to "death." In this article, he demonstrates that the tendency of brain dead patients toward asystole is transient, such that the observable data show numerous cases of patients who have stabilized after the initial "acute phase" of the onset of neurologic injury. In 2001, he followed up his research with a devastating article (Shewmon 2001). Since that time, numerous peers have come to agree with Shewmon, that "brain death" is not "organismic death." James M. DuBois, presents an interesting overview of the controversy in his article, "Brain Death and Organ Donation," *America* (2 February 2009): 19–22. We do not suggest that DuBois sides with Shewmon, but that his article provides a synopsis of the current state of the controversy, naming some of the integral figures on the side of those who oppose brain-related criteria for the determination of death. He names, among others, Paul Byrne, M.D., former president of the Catholic Medical Association, who, as recently as 2009, had flatly asserted that "the transplantation of unpaired vital organs ... causes the death of the 'donor' and violates the fifth commandment of the divine Decalogue, 'Though shalt not kill' (Dt. 5:17)," attaining over 400 co-signatories (DuBois, "Brain Death and Organ Donation," 19). Also of note is Potts et al. (2000). Austriaco, O.P., sees the standard as motivated entirely by the desire to obtain organs for transplantation, and not by any medical confidence that the patient of first instance is actually dead. See his article in Austriaco (2003). Austriaco argues,

instead, for the loss of somatic integrity as the minimally acceptable criterion for determining death of the person. See also Austriaco (2009). Still another important voice, here, is that of Grattan T. Brown, who, while not coming out decidedly against the brain-death criterion, takes the controversy seriously, and prescribes caution. See also Brown (2007).

10. *Catechism of the Catholic Church*, n. 2296 (cf., also, n. 2301).
11. *Ibid.*, n. 2296.
12. John Paul II, "Address to the 18th International Congress of the Transplantation Society," n. 4. *My emphasis*.
13. *Ibid.*, n. 5.
14. In philosophical terminology, "epistemic" refers to that which relates to the acquisition or operation of scientific understanding. It derives from the Greek, ἐπιστήμη (*epistēmē*), which connotes a systematic, didactic understanding of an issue. Moral certainty is not an epistemic condition because it does not emerge from a fully systematic understanding of the issue upon which a person is called upon to act as a moral agent, but from a reflective consideration of the identifiable limits of one's understanding in the face of the duty to assume a positive posture, or to elicit an imminent act.
15. *Ibid.*
16. Pius XII, address, "The Prolongation of Life," 398.
17. John Paul II, "To the 18th International Congress of the Transplantation Society," n. 5.
18. Benedict XVI addresses this concern in his "Address to Participants at an International Congress Organized by the pontifical Academy for Life" (November 7, 2008), where he says:

In these years science has accomplished further progress in certifying the death of the patient. It is good, therefore, that the results attained receive the consent of the entire scientific community in order to further research for solutions that give certainty to all. In an area such as this, in fact, there cannot be the slightest suspicion of arbitration and where certainty has not been attained the principle of precaution must prevail. This is why it is useful to

promote research and interdisciplinary reflection to place public opinion before the most transparent truth on the anthropological, social, ethical and juridical implications of the practice of transplantation. However, in these cases the principal criteria of respect for the life of the donator must always prevail so that the extraction of organs be performed only in the case of his/her true death. "Benedict references the *Compendium of the Catechism of the Catholic Church*, n. 476."

19. John Paul II, "To the 18th International Congress of the Transplantation Society," n. 8. *My emphasis*.
20. Indeed, it should be noted that theologians are well-aware of the fact that few popes, historically, have been able to claim sole authorship of the various teaching instruments promulgated under their authority, and that not all magisterial documents bear the same authoritative weight. Speeches are directed at specific audiences, in circumstances decidedly conditioned by history and culture—for example, by the current state of scientific understanding concerning a specific matter of inquiry—and thus, carry little authority in the grand sweep of the Tradition.
21. The National Catholic Bioethics Center posts an "FAQ on Brain Death," in which they pose the question, "Why do some say that taking organs from those declared dead by neurological criteria is a form of homicide?" The response to this question reads, "Such comments are irresponsible. Those who make such statements wrongly believe that a person is still alive because the corpse appears to be alive from the effect of oxygenated blood continuing to be pumped through the body by mechanical means. Those who reject the use of neurological criteria for the determination of death claim that a patient declared dead by this method is killed for his organs. Such comments overlook the important distinctions mentioned above, and are in tension with sound Catholic teaching" (FAQ on Brain Death; <http://www.ncbcenter.org/Page.aspx?pid=436>). Unfortunately, there simply are no "important distinctions mentioned above" this

- assertion. The entire FAQ begs the question of whether neurological criteria are sufficient to determine true death of the person, and, instead, simply affirms the consequent on this matter.
22. Cf., however, Karakatsanis and Tsanakas (2002). Also relevant is an earlier article by Trouog (1997).
 23. There, they assert that, "when the whole brain is dead, the person is dead, since the organ that is the source of unified activity no longer functions, even though there may still be signs of residual cellular activity in the brain and other parts of the body."
 24. Shewmon was personally familiar with this case, commenting on it in his article, "Chronic 'Brain Death'," 1543, while the patient was still, by all other criteria, alive. In his keynote address, "Brain Death," at a conference in March of 2009 (*The Ethics of Organ Transplantation*, The Center for Thomistic Studies at the University of St. Thomas and St. Joseph Medical Center, Houston, TX, March 27–29, 2009), Shewmon shared the results of the patient's post-mortem. It was discovered that the brain had completely calcified, indicating that the brain had, indeed, been dead for quite some time before total system failure occurred.
 25. Actor Christopher Reeve, for example, who was manifestly not dead in the interval between May 27, 1995, and October 10, 2004, had been maintained during that interval on a similar type of machine. The sole discernable differentiating element between Reeve and the boy in Shewmon's study was that Reeve's brain remained alive. Apart from this difference, both patients maintained somatic integrity, although the boy remained supposedly "dead" longer than Reeve remained manifestly alive in this state.
 26. The Greek σῶμα (*soma*) refers to an organism as a living whole. This term appears 142 times in the New Testament in one form or another. It is the word that Christ employs in the Institution Narratives in the synoptic Gospels, when declaring that, "this is my body" (Matthew 26:26, Mark 14:22, Luke 22:19, cf., also, 1 Corinthians 11:24)—that is to say, "This is me in my entirety as a living whole." St. Paul's theology of "the body of Christ" is built upon this word. Telling, also, in the New Testament, is the fact that Christ's σῶμα, rather than his σὰρξ (*sarx* = *flesh* or *meat of an animal*) is taken down from the Cross upon his death and laid in the tomb (Matthew 27:58–59; Mark 15:43; Luke 23:52, 23:55, 24:3, 24:23; John 19:31, 19:38, 19:40, 20:12), because Christ's death is itself a triumph over death—over the *dis-integration* of σῶμα into σάρξ, confined as it is to the coming-to-be and passing-away of biological life or βίος (*bios* = *life of the animal* or *the duration of earthly life*) as opposed to ζωή (*zoë* = *true life* or *spiritual life*). The reintegration of the σῶμα through the raising of βίος into ζωή in Christ is one of the New Testament's meta-narratives, which stands at the foundation of the concepts of Incarnation, resurrection, ascension, assumption, and παρουσία (*parousia*), and which must, for that reason, also form the foundation of our concept of the integrity of the body-soul totality as "materially instantiated spirit" or "spiritually realized matter."
 27. Moraczewski, "Death and the Determination of Death," 12/4. My emphasis.
 28. Cf., Aquinas, *Summa theologiae*, I, q. 76, a. 8. See, also, *Catechism of the Catholic Church*, n. 365.
 29. Moraczewski, "Death and the Determination of Death," 12/5. My emphasis.
 30. John 11:1–44.
 31. The classic text on this matter, written from the perspective of a medical professional who, as such, is not invested in a specifically philosophical or theological interpretation of his observations, is Moody (2001).
 32. In fact, Christian tradition suggests an intuition of faith with respect to the issue of a temporal duration to the process of dying. Pius XII had insisted that, there remains sufficient doubt as to the precise moment at which the process of dying has reached its term that the sacraments should not be withheld from person's diagnosed with "brain death" (Pius XII, address, "The Prolongation of Life," 396–397). The practices of venerating relics of the saints and burying the deceased with a view toward resurrection, suggest that the deceased maintains some transcendent link to the body he or she has left behind. We

- agree that such persons are “dead,” but even in the face of this agreement, the relationship between the soul and the body remains a mystery. Similarly, cases of miraculous preservation or “incorruptibility” of the bodies of certain saints, whether in whole or in part—for example, St. Catherine of Siena, St. Jean-Marie-Baptiste Vianney, and St. Bernadette Soubirous—and, as in the case of St. Nicholas of Myra, for example, the unexplained expression of aromatic oils from the bones of some saints, are difficult to ignore as a sign of some meaningful connection between the deceased and the body of the deceased, once again, enshrouding the question of how long it really takes finally to die in utter mystery. Death itself, even beyond the process of dying, is a mystery, for Christianity. St. Thomas, in one passage, for example, even goes so far as to describe the separation of the soul from the body as an “unnatural” condition, which, for that reason, cannot constitute a perpetual state of nature for human beings (cf. Aquinas, *Summa Contra Gentiles*, IV.79).
33. This terminology derives from the philosophy of Aristotle, who noted that among the definitive marks of a true “substance” is its ability to take on contraries while yet remaining what it is in itself (*Categories* 5.4^a10–4^b20). In other words, Socrates can be, at one moment, thin, and at another moment, obese, while yet remaining Socrates in both conditions. Socrates, the “substance,” exhibits the “accidental characteristic” of being obese. Thin or obese, Socrates remains Socrates, but without Socrates, there can be neither “thin” nor “obese.” Scholastic philosophers and theologians applied this way of thinking about physical substances to acts, which they regarded as, in a sense, “things”—intentional objects produced by willful human agency. This language was meant to convey the fact that human acts—acts performed with understanding and free-will—have their own innate structure: a kind of “essence.” On this model, reflected in official magisterial teaching even today (cf. *Catechism of the Catholic Church*, n. 1749–1761), an act of the same structure can be performed under different circumstances and remain the same *kind* of act: an innocent man can be killed for his wallet in the prime of his life, or for his liver in his final agony. The difference in circumstance is “accidental,” but the act is the same in “substance.”
 34. The so-called “Pittsburgh Protocol” was introduced by the University of Pittsburgh Medical Center in 1993, and was accepted by the Council on Ethical and Juridical Affairs (CEJA) of the American Medical Association in their Report 4–I–94, *Ethical Issues in the Procurement of Organs Following Cardiac Death: The Pittsburgh Protocol* (1994). With this report, the Pittsburgh Protocol was provided a space for entrance into the mainstream of medico-ethical practice. This protocol permits the procurement of organs for transplantation in conformity with the so-called “dead donor rule” a mere two minutes after cardiac arrest. According to this protocol, cardiac arrest is deemed “irreversible” if the patient, or the patient’s surrogate, has agreed to withdraw life-sustaining interventions. Cardiac arrest in these cases is “ethically irreversible,” even if not “medically irreversible,” satisfying the ethical standards of the CEJA and the staff of the UPMC.
 35. In a review of thirty-eight cases of auto-resuscitation, seventeen achieved functional neurological recovery. Of this number, only three subsequently died prior to discharge from the hospital. Of those who were successfully discharged, one had auto-resuscitated after an interval of fully 20 minutes (Adhiyaman, Adhiyaman and Sundaram 2007, 553, table 1).
 36. The reader may bring a charge of *argumentum ad ignorantiam* at this point. That charge would hold, however, only if we restricted the parameters of our argument to what we do not know. In the present case, we have introduced evidence demonstrating positive knowledge of non-immediate death in a limited number of cases, thus placing the burden of demonstration upon the shoulders of the person who would argue for immediate death. It is not possible to observe immediate death, empirically, if, indeed, it ever occurs; but the non-immediacy of death has been observed, empirically, in some cases, where, in fact, these patients

- did not die after prolonged periods of asphyxia.
37. Perhaps the most vocal proponent of this view today is Robert D. Truong, M.D. We have already referenced his article, "Is It Time to Abandon Brain Death?" His position is unchanged in Truong and Robinson (2003), and in his article, Truong and Miller (2008), he and Miller argue in favor of a "non-maleficance" standard, according to which the patient is harmed in no meaningful respect. On grounds that the patient would be expected to die whether or not his or her vital organs were removed, the removal of vital organs would harm the patient in no significant respect, instead, merely changing the interval of time until final realization of the ultimate patient-care outcome ("The Dead Donor Rule and Organ Transplantation," 675). Truong's reasoning rests, of course, on unabashedly utilitarian and consequentialist presuppositions, which, from within a Catholic frame of reference, would have to be rejected (cf. John Paul II, encyclical letter, *Veritatis Splendor* (6 August 1993), 74–79. It is clear that Truong, who proposes that we reject brain-related criteria for diagnosing death as inherently incoherent, does not regard as a *per se* evil the deliberate, direct killing of the innocent. For him, death—whether we are speaking of "brain death," "cardiac death," or "true death"—is not a decisively relevant factor in the decision to harvest organs ethically. Once an unthinkable position, Truong's option must be regarded, today, as precisely the terrain upon which this debate is now taking place.
 38. In philosophical terminology, "organismic" refers to that which pertains to the organism *as* organism. The integration of organ systems, for example, is an "organismic" quality. Ms. Shiavo was "organismically" alive at the time her fate was being decided in a Florida courtroom: all of her essential organ systems were functioning, she maintained homeostasis and underwent spontaneous respiration, and she was capable of digesting her own food, however severe her impairment may otherwise have been.
 39. This definition comes down to us as, *naturae rationalibus individua substantia* or *an individua substantia of a rational nature*. Boëthius provides this definition in his *Contra Eutychen et Nestorium*, III.4.
 40. In formulating his definition of "person," Boëthius was attempting to safeguard the orthodox Christian position of the Councils of Ephesus (431) and Chalcedon (451), that the Christ is a single, integral whole of God and humanity, not two separate beings (as in Nestorianism). His reference point for the term "person," in this context, then, was the *divine* (ὑπόστασις) *hypostasis*, and he was not, therefore, attempting to trace out the precise boundaries of *human*-personal existence, much less to do so in the light of today's ethical considerations. We may regard Boëthius' contribution as useful for anthropological discussions, and as generally true, even within this context foreign to his own concerns; but we cannot call his definition finally "complete." On the other hand, Boëthius and the Fathers of these foundational Christological councils must be credited with introducing a concept of personhood conducive to developments in philosophical anthropology that had not been visible to philosophy prior to their illumination by the concerns of theology to articulate the dogmatic content of the faith.
 41. Wojtyła, "Subjectivity and the Irreducible in the Human Being," 212–213.
 42. Rosenberg quotes this passage in "Consciousness, Coma, and Brain Death," 1173.
 43. *Ibid.*, 1173–1174.
 44. Cf., David Hume, *A Treatise of Human Nature*, I.4.vi.
 45. John Paul II, "To the 18th International Congress of the Transplantation Society," n. 8.
 46. Cf., Wojtyła, "Subjectivity and the Irreducible in the Human Being," 213–215.

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BIOGRAPHICAL NOTE

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