



THOMISM AND THE NEUROLOGICAL CRITERIA FOR DEATH

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Biological life is characterized by the presence of a soul, and biological death is characterized by the withdrawal of the soul. Human death is the separation of the rational soul from the body. As St. Thomas Aquinas wrote in his *Summa theologiae*:

On the withdrawal of the soul, no part of the body retains its proper action; although that which retains its species, retains the action of the species. But act is in that which it actuates: wherefore the soul must be in the whole body, and in each part thereof. . . . We must observe, however, that since the soul requires variety of parts, its relation to the whole is not the same as its relation to the parts; for to the whole it is compared primarily and essentially, as to its proper and proportionate perfectible; but to the parts, secondarily, inasmuch as they are *ordained to the whole*.¹

It is worthwhile to point out: (1) that the withdrawal of the soul leads to the loss of proper action in the body and (2) the relationship of the soul to the whole is different from its relationship to the parts of the whole, for the parts are ordained to the whole and make sense insofar as they operate in the integration of the whole.

Pope St. John Paul II tells us that, although death cannot be observed directly through scientific or empirical methods, scientific observation is nevertheless entrusted with recognizing the biological signs that inevitably follow death.² Though the Church can speak about the nature of death in a theological and philosophical manner, it is beyond her scope to determine death in a scientific or clinical capacity. This is affirmed in Directive 62 of the *Ethical and Religious Directions for Catholic Health Care Services*: “The determination of death should be made by the physician or competent medical authority in accordance with responsible and commonly accepted scientific criteria.”³ In 1985 the Pontifical Academy of Sciences – in conjunction with contemporary scientific findings – stated that death can be determined at (1) the definitive cessation of spontaneous cardiac and respiratory function or (2) *the total and irreversible cessation of all brain activity*.⁴ The criteria for whole brain death involve *all* parts of the brain (the cerebrum, the cerebellum, and the brain stem). Though antiquity held the locus

of personal action to be in the heart, our modern understanding correctly places it in the brain. However, that is not to say that we are to attribute all our functioning to the brain in a materialistic or purely mechanistic way; rather, it points to the idea that the rational human soul operates in the body through a certain primary organ that directs and integrates the capacities of the body.

In questions 75 and 76 of the first part of his *Summa theologiae*, Saint Thomas Aquinas tells us that the soul is “the first principle of life of those things which live” (*ST* I.75.1 corpus). Living things—whether they be vegetables, non-human animals, or human persons—are alive because they have a soul. Unlike angels who are pure spirits, humans are composite beings, comprised of soul and body (*ST* I.75.7 corpus). Additionally, the union of the human soul to the body occurs in such a way that the soul is the form of the body, meaning that the soul informs and organizes the body to be as it is meant to be (*ST* I.75.5 corpus). This relationship also means that the soul is the primary principle of our nourishment, sensation, local movement, as well as cognitive understanding (*ST* I.76.1 corpus). We are rational animals.

Lastly, Aquinas held that the soul leaves the body at the cessation of breath, not because breathing is the means of union but because of “the removal of that disposition by which the body is disposed for such a union” (I.76.7 ad 2). In other words, we would be able to tell that a once-living body is dead because the cessation of breath demonstrates that the body is not disposed in a way for union with the soul, for the soul is no longer integrating an organism and directing its functions. Though we may not be able to point out the exact moment of death, we can observe *that death has already occurred* through observable means.

The Integrationist View

Drawing on other works from Aquinas,⁵ Jason Eberl synthesizes the Angelic Doctor’s teaching on this matter by stating that death entails the loss of the union of the soul to the body as a form as well as the loss of the operation of life and unified organic functioning. This is the body’s inability to actualize the soul’s vegetative capacities—the clinical criterion of which is “the loss of vital metabolic functioning as evidenced by the cessation of respiratory activity, according to Aquinas.”⁶ Eberl continues, “Aquinas understands a rational soul to be the principle of a human body’s organic functioning and to operate by means of a *primary organ*. Aquinas, following Aristotle, identifies the primary organ as the heart, although contemporary science would identify it as the brain.” Eberl notes that Aquinas explicitly designates the cessation of breath as the criterion for determining death, but had Aquinas known about human anatomy as we do today, he would have accepted neurological criteria for death since *the brain* is truly the primary organ by which the soul moves the body and holds the human being’s vegetative, sensitive, and rational capacities.