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Brain Death and the Philosophical Significance of the Process of Development of, and Cessation of, Consciousness in Arousal and Awareness in the Human Person.

by

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I am arguing that the human person, as the human identity from conception to death, links death with the beginnings of life and vice versa. This challenges us to identify the human person as one in a unitary development, physical and spiritual, that is sundered only at death. In approaching the matter from this angle I bring into focus the problem of identifying what happens at death and the problem of identifying what happens at the beginning of personal life. This requires seeing through our psychological states to discover the necessary substratum that actually is the human person.

At the outset, death is taken as the demarcation between the "process of dying and disintegration" (1Garcia, 37). Death occurs with the irreversible loss of consciousness states, arousal and awareness, together with the loss of critical neurological function. This loss signals "inseparably and inherently, the cessation of the organism as a whole"(Ibid.). The exact moment of death might possibly be recognizable within technical limitations but even then as post factum (Bernat, 16).

However, it is important that this elusive exactitude be recognized as a necessary reference point.

Critical for philosophical consideration are the areas of the brain that are vitally necessary for ongoing life (Veatch, 19). This corresponds to the holistic human being functioning with the coherence of the "neural basis of consciousness"(Garcia, 35). Consciousness and this specific neurological substratum are inseparable for living and life support. This concerns the integral functioning for life within and also external to the brain (Garcia, 37).

It seems quite an obvious matter to know when someone is dead, at least in our usual understanding as is commonly stated when people do say someone has passed away. Someone has left us. When we are conceived and begin to live and grow is a more mysterious event simply because it is invisible to the naked eye. Nevertheless, we do, in retrospect, speak of when we were conceived and trust that our parents enjoyed the experience and love us yet.

Parents, especially mothers, are much more likely to pinpoint the moment of a new life beginning within them, though some spiritually sensitive fathers may well share this as well. Such spiritual communication is an arousal in life akin to a wakefulness from non-existence. It should not surprise us to find that some people are more sensitive spirits than others. We are very familiar with the gracefulness and power of the synchronized body of an Olympic athlete and can contrast this with the more usual physical specimens of humanity. We also recognize great souls, such as the late Mother Teresa of Calcutta, simply as being great. Just as great athletes must practice and train, and great souls must self-direct their attention for their gifts to flourish, so too the spirit responds to fine-tuning in its communicating ways.

The very word "spirit" signifies for Aquinas, a "power of the soul"(ST.1a.79.13). For my purposes, spirit will be considered as the human self, communicating invisibly, as distinct from the human self being responsible. The spiritual heart or operating soul bears the responsibility of governing our spiritual lives. This it does through its rational will and its free choosing. Fulton Sheen considered spirit as the capacity for God. This then would indicate our spiritual capacity for other, lesser spirits, as well (Sheen, Retreat). I will use Spiritual Heart or simply heart, and soul or operating soul, synonymously throughout. The spirit is defined as the self, communicating invisibly.

More will have to be said about our beginnings. At first, though, I will open up the end of life. This should make the problems more clear as to the make-up of a human being viewed from the end of life. This, in turn, will

incline the discussion to the beginnings of life so that both the beginning and the end will throw light on the human constitution, even its destiny.

Considering Death:

In our technological age of Intensive Care treatments, and especially the need for organs for transplant, when we are actually dead is a matter of considerable importance. Robert Veatch wonders why the problem of a criterion for death, in terms of death of the brain, has been so long debated. The modern technological aids to determine when death has occurred were expected to be conclusive and provide an easy and obvious answer. He finds the ongoing debate, however, centered on who is a moral person enjoying equal status with all others that constitute the "human moral community" (Veatch, 24). The debate has produced sharp divisions. Veatch recommends a conscience clause in law to protect people who have religious, cultural or even ethnic convictions concerning the death event in their own case (Veatch, 21-22). Being precise about the actual death of a donor may not be a restraint on some operators. Organs could be removed prematurely, even tragically.

Bernat, in the face of Veatch's persistent criticism of the Whole Brain concept as criterion for death (Bernat, 14) together with his own observation of the inadequacy of it in certain cases to determine death, has adjusted his own position. He seeks certainty by adding to it proper consideration of the final end of activity of critically necessary "functions of the organism as a whole" (Bernat, 17). This is something of a patchwork which leaves open to interpretation the knowledge of the area of the brain that may be "critical" to Brain Death (BD). Truog reckons that despite common knowledge about and usage of, BD as a basic standard, the concept "remains incoherent in theory and confused in practice". He also opines that the use of BD as a standard for death should cease. This sense of dissatisfaction with a BD standard is noted also by Shewmon on logical and physiological grounds (Shewmon, 328). He looks for some other standard of increased credibility, based on accurate science. (Ibid., 330).

Consciousness and its biological basis, necessarily and intimately linked in mutuality for life, will be presented as this scientifically based requirement. I will refer to this as the mutuality principle.

There are seven sections following:

- A. Consciousness as a Focus for Life and Death.
- B. Human Person and Personhood.
- C. Integrated and Integrating.
- D. Mutuality of Consciousness and Brain Viability.

- E. The Problem of the Human Spirit.
- F. Death as Event.
- G. Conclusion: Justice and Love in the Meaning of Life.

A. Consciousness as a Focus for Life and Death:

The Important Distinction: Arousal and Awareness:

Dr. Alex Machado, Ph.D. is credited with clarifying the distinction between consciousness as arousal and consciousness as awareness (Garcia, 32). Arousal is associated with wakefulness and awareness with the content of consciousness. Machado asserts that higher-brain advocates in the BD literature consider capacity for consciousness (arousal) but use the content of consciousness (awareness) to demonstrate this as factual. This is a cause for confusion (Machado, 58). Veatch's summation suffers under this criticism (Veatch, 24).

This awareness, or consciousness' content, stands for the ensemble of cognition and affectivity in mind workings. Included in it is the knowing of the self-existing, coupled with recognizing and knowing the inner world and the outside world (Ibid.). Its loss alone does not signal death (Ibid.59). Machado insists that awareness is preceded by arousal, the first "element" of consciousness in the developing human (Ibid.). Basic consciousness as arousal, "autonomic-vegetative brain function", is recognized as "wakefulness" (Machado, 58). We cannot then be dead until the loss of both the awareness and arousal aspects of consciousness.

This distinction between arousal and awareness should cause us to look at such sufferers as Alzheimer's disease victims, and their families, more acutely. A spouse, for instance, would enjoy a relationship having a more shared content of consciousness with a sufferer than would others. The spouse would also have more to lose in terms of felt relationship. Grandchildren, for example, may well have a simpler arousal relationship and so would not feel the weakened communication so keenly. Love is spiritually communicable in silence. This would be especially true when only one person in the dialogue could actually physically speak and be heard. Nurses, especially in nursing homes, commonly work on patients' arousal level of consciousness using whatever means of communication is available to them and which is effective.

Machado's distinction compels us to reconsider any recognition of consciousness with care. It can be disastrous to consider a person dead simply because their awareness is lost. When awareness is lost the person may be simply in a temporary coma, or a PVS¹ and alive. It is solely in this

P.V. State that arousal and awareness are clearly dissociated (Machado, 61). The Multi-Society Task Force patently indicates the difference between various forms of unconsciousness and actual death considered as Brain Death. In brain death proper "none or only reflex spinal movements" are detectable (M-S T.F. 1502).

When a pregnant woman falls into a PVS for example, she can be kept on life support to aid the maturation of the fetus even from the "sixth to the thirty-fourth week" in the womb. If the woman is truly brain dead, however, the use of circulatory-respiratory life support would keep the womb viable "for a matter of days, rather than weeks" (Lamb, 100).

Brain "Plasticity" is a pertinent difficulty in pinpointing critical brain areas of activity. This "plasticity" recognizes that some neurones are capable of developing new pathways through the brain. Thus the fact that some identifiable areas of the brain are defunct does not necessarily mean that consciousness functions are actually lost. Some brain "plasticity" found in infants infers that some such "plastic" neuronal activity continues in adults in various areas of the brain. Deep brain stimulation in adults confirms this. Hence, there is not simply one portion of the brain's anatomy able to be isolated which suffices for and necessitates continuation of consciousness. However, there are neuronal interactions that do give subservice to both consciousness elements (Machado, 60-63).

There are three observations that flow from Machado's position.

1. Consciousness is the most effective means of bodily integration.
2. Nothing else could act in the effective way consciousness does.
3. It alone brings together the holistically living organism "when it is possible" which intimates the material potentiality being realized (Machado, 64).

Machado's definition of death is the irretrievable losing of the two "components of consciousness, arousal and awareness" (Machado, 63). It is consciousness as content that is first lost as the bodily organism fails. This consciousness element provides what is necessary for individual recognition and to "enrich personal identity" (Machado, 59). Arousal comes earlier in brain development (*Ibid.*). It fails us last.

Garcia offers the clearest presentation of the mutuality principle in stating that death is "the irreversible loss of consciousness-organism as a whole integrated functioning" (1 Garcia, 37). This is a median position which avoids reductionism from viewing properties that are considered specific to humanity. Veatch's Higher Brain position, which sees loss of higher functions as necessarily including loss of lower functions, is open to

reductionism (Veatch, 19). The opposite extreme considers the cessation of bodily integrity as the criterion for death. This is slanted towards dichotomy (Machado, 57). Garcia nominates a specified "subtotal but critical array of neuronal populations" as necessary for life (1Garcia, 37). This ensures a median position and also satisfies the specific concern of Veatch for the required philosophical need of an accurate anatomical base (Veatch, 19).

Garcia supports and expands Machado's position but takes a more rounded view of death. He views death as a "biological-psychosocial-spiritual phenomenon" (Garcia, 36). A philosophical input on the significance of the process of consciousness developing in conjunction with the brain is therefore required. Any omission of this Garcia holds as a major oversimplification (1Garcia, 32). Just how the arousal aspect of consciousness comes into brain development and contributes to the content of consciousness needs consideration (Ibid.).

Veatch's mind/body integration oversimplifies the matter. I would think he knew this by asking for it to be further discussed (Veatch, 24). I posit that the mind is made up, changed and developed by a living person who is a body-soul-spirit integrated, integrating and functioning unitary complex. Others point to this. Aquinas' "gift to the world" was his insistence in linking together our human intellectual abstraction with sensory activity in our knowing system. In this he is somewhat aided by Scotus (Sutor, 263). Bonaventure elaborates this by holding that the likeness of the object is "engendered" by the external sensory "organ", passed to the internal "organ", the brain, and thence to our "apprehending faculty" (Bonaventure, 20). We delight in what we know "based on proportion" (Ibid.).

Our knowing system of sense and the spiritual is not in conflict with cognitive science. Cognitive science speaks of the exemplar in the external world, the stereotype handed down for learning, as for instance the typical nurse, and the prototype as formed in the neurological brain (May et al, 5). The spiritual aspect must be included. I will argue for Garcia's expanded view of consciousness and death. In sum, consciousness must be adequately appreciated and considered and anatomically well grounded.

However, at this juncture, I will examine the person as concept and identity.

B. Human Person and Personhood:

Conjectural positions regarding persons and personhood are conflicting. (Veatch, 20). The law in the USA discusses whether or not a human being is an alive, individualized one. Hence any discussion about

“personhood is irrelevant” for that context (Ibid.). However, marked human qualities are found in consciousness awareness, not simply arousal. These are quite necessary “and enrich his personal identity”(Machado, 59). In this perspective “personal identity” precedes its being enriched. I argue for “personal identity” from conception.

Person and Personhood:

Singer claims “bioethics uses the term, person in a particular fashion. ‘Person’ is now often used to mean a being with certain characteristics such as rationality and self-awareness” (1 Singer, 180). He has no problem with using the term person for animals. He claims that most of the modern theories appear derived from Boethius (+524) who offers person as “an individual substance of rational nature”(Ibid.). Singer follows on from this and from Locke who distinguishes the thinking self from the underlying biological self (Ibid.). Then, for Singer, there are divine persons, human persons, animal persons all simply reduced to persons without regard to differences of substance, dignity, importance, ability and right to life (1.Singer, 181-183). Such negativity is to reduce all to masks and then assert that all masks are the same. It is of interest that he compares a healthy baboon with an anencephalic human child. He complains that we take organs from the baboon but spare the disabled child as “sacrosanct”(1 Singer, 183). He does not compare a healthy baboon with a healthy human of some maturity. It is as if he simply lets ideas intermingle so as to permit drawing conclusions as one wishes, prefers or desires. He asserts that the sanctity of life ethic is “at the point of collapse”(2 Singer, 231). Life and death are considered as conveniently as you might wish in this approach. The concept of person suffers under Singer’s negativity.

Aquinas (+1274) preferred rational essence to rational nature in defining person, to overcome the problems later raised by Singer. Thus, the human person did enjoy a special place in nature. In fact the human person “means that which is most perfect in the whole of nature” (ST 1a 29.3). The high point of its excelling is possessing “a dominion over its own activity”(ST.1a.29.1). Scotus (+1308) a generation later, held that the person was to be not just recognized but also revered by “indifference”(De Saint Maurice, 343).² For Scotus this would entail a recognition of what a person, human or divine was, so as to hail the self-possessed person by virtue of substance. Aquinas and Scotus would be in concert in their appreciation of a person.

The Embryonic Human Person:

Dianne Irving correlates the human embryo, even from fertilization, with the human person (Irving, 26-40). The scientific answer to the identity of the human embryo is that it is a human being from the moment of fertilization (Irving, 32). There is a clear consistency of opinion regarding the commencement of life for each and every human being (Op. Cit. 31). Then, too, personhood is based on an actuality. It is not enough to define a person simply on feelings or thoughts (Loc.Cit.33). In her view the philosophical opinion of a human being as human person needs to be based on correct science. Gaita, laudably I think, makes a great deal out of the preciousness of each human being (Gaita, 26). To deny this preciousness, or worse still, to ignore this in others, is to deny our common humanity. Being dismissive of a deep inner life in others does this (Ibid.57-59).

The Question of Fertilization, Death of the Gametes and New Life:

When it comes to fertilization, one question remains unanswered. What happens when the sperm cell breaches and enters the egg cell? The resultant should be a cadaveric conglomerate of dead cells and so should be dead. The union of two living one-cells, sperm and egg, results in the destruction of them both as single cells. Since both have begun to disintegrate their deaths are past events. Disintegration of what was living follows death (Bernat, 15; Garcia, 31; Gert, 24 et al.). Consider a bicycle tire punctured. Whether the puncture is small or large is irrelevant to the tire's loss of air and "death" as a tire.

Consider, too, the work of the spirit. The spirit of the parent of a haploid (N chromosome) cell could not bring back to life what has been discharged from its body corporate. The spirit is a communicating power and not a life-giving one. It would ensure temporary viability only. The spirit's presence would cling to the gametes. This would apply to the male manufactured gamete (N) and the ripened female gamete (N) discharged into the fallopian tube.

It might be objected that a nucleus could be extracted from a unicellular organism and transferred to another unicellular organism whose nucleus had been removed, as in Dolly the sheep (Billings, 17). However, the donor spirit kept alive the extracted nucleus, as Dolly's aging clone showed. White's experiment illustrates this phenomenon. A monkey's head severed from its body in a laboratory setting may continue to show signs of consciousness. It is not yet dead (White, et al. 135-9 in Gert, 26). This illustrates the presence of a spirit, even an animal spirit, and its

integrating activity even to separated parts of the body. It is also possible that a new life-giving animal soul is created. It would then be seen to have to struggle with an older and inadequate biological body basis from the transferred nucleus.

The human soul, for Scotus, is simply one but with distinctions of a formal nature (De Saint-Maurice, 198-200), which are recognized by reason, though not separated in substance. Such would be that of soul and spirit-of-soul, or simply stated by Aquinas as spirit/soul (Aquinas, ST. 1a 79.13). Animal souls are for animals and vegetative souls for plants, but these do not answer to eternal justice and love. The created human spiritual heart, by its action with the fused gametes, must be one and integrated in itself. Otherwise, the new life, a human being and person, would lack the base for human consciousness as the integrative power needed for human development, its self rule and concomitant responsibility. This base becomes recognizable in human communicative terms first as simple presence, then as consciousness as arousal and then, further developed, as awareness.

New Life:

We know that the gametes' contents do live on when there is fusion under adequate conditions. The IVF programs show this. There must, therefore, be required a power for development, greater than simply a communicating spirit. This power would drive the new chemical mixture and combine with it to become in an instant an integrated and integrating organism, the nascent human being and person. This need would be answered by the creation of the personal spiritual heart, or soul, at the fusion point by God. This new organism is a new life, an integrated and integrating person in action. Already this new life is heading for the chromosome exchange that will form the genetic foundation of the new diploid (2N chromosome cells). It will be identified by such things as personal fingerprints, DNA, and ECG. Should the new life's development fail it would be from biological insufficiency or human destructive intervention. In such cases, death comes early in life. We can only commend those souls to God's love and care.

As an alternative view, Ford holds for the traditional ensoulment position. The soul would require being created only after the beginning of "the human individual". There would not be any "empirical" evidence. It is in this action that each of us humans "is formed to be a person" (Ford, 262). How the process of developing fertilization reaches the individual status from dead cellular material before it can become a person is not

addressed. That is a huge problem for holding for the ensoulment of a posited already living unit.

It is known that "spontaneous generation cannot take place"(Iglesias, 108). This type of generation was incorporated in the thinking of Aristotle and Aquinas, with their limited science. Their thinking is somewhat responsible for the traditional notion of ensoulment. They used souls changing into different types of souls to overcome their difficulties (Ibid.). Scotus' view of the human soul as "unique and simple" eliminates this plurality of souls in the human being (De Saint-Maurice,198). A different look at the moment of fertilization would, as I have outlined, be more productive.

C. Integrated and Integrating Function: Machado's Proposal:

Machado's insight is that consciousness is responsible for our being both integrated and integrative "when it is possible,"(Machado, 64). It becomes possible when the gametes fuse and the soul is created. It remains possible while anatomically and physiologically able. The specification of the spiritual heart as the seat of consciousness as a philosophical necessity would chime in with Machado's conviction. The soul operates in union with the developing body and itself matures. Philosophically, the soul supplies Garcia with the underpinning for the soul/brain development and concomitant development of consciousness, both arousal and awareness³ (1Garcia, 32). Garcia has asked this of philosophy (Ibid.).Garcia implies that the process begins before the brain formation, which would be from conception. Thus the integrated and integrating spiritual heart supplies the power for the integrated and integrating organism to live as a unit.

Opposite Views:

As an alternative viewpoint, the term evolution is produced. This is theoretical speculation about some mysterious power to fill a gap in the productive sequence, which somehow gives new life from dead matter. It can also be used to cover any possibility of how things change. This is truly a genuine missing link. Nature abhors a vacuum so it is said.

However, quite to the contrary of this opposite view, the creation of spirit life requires a creator even for flora and fauna. It is more needed for the human person. Without the created spiritual soul there is no substantive power to bring about the development of the unitary human being, nor to instigate and drive the integration of the body as consciousness producing. The soul, as integral in its own spiritual reality, supplies the power, as the seat of consciousness, for the unitary development of the human person.

Then again, Lockwood takes a different position. He holds that human identity is dependent on the human brain so that the beginning and end of all human persons' lives are determined by the brain (Lockwood, 45). How can the brain form the brain to become the necessary substratum of human life? Any such position requires some materialistic action to form the brain so that the brain may sustain the living whole. He seems to dismiss spirituality as nonexistent. Lockwood speaks of "brain life". At the same time he would forbid an embryo or fetus, having been subjected to experiment and been irreversibly damaged, to be allowed to develop further. He would abhor a deformed psychological development (Ibid.). Ford finds that Lockwood considers that existence begins in the span between "conception and birth" (Ford, 157). I prefer the spiritual soul as the reasoned substratum for life given and ongoing.

These alternative concepts of Persons, as espoused by Lockwood, in lieu of having a created soul, or by Singer and others basing personal identity on psychological grounds are not very attractive. A dying person may lose their sense of identity and yet remain alive (Lamb, 93). If death should be decided by simple psychological observation of the loss of personhood, understood psychologically, a living unconscious human being such as a PVS person would be condemned (Ibid.). I reject them as unreal.

Singer's position is a case in point. "The person rather than the body" is what we ought to care about (2 Singer, 236). From the Bland case, where arousal had not been lost, Singer concludes that loss of consciousness, as in Bland's case, gives sufficient grounds for doctors to terminate the patient's life as being of "no benefit to her" (Ibid.,242) . Singer now seems content to rely on the Law Lords of Britain to bolster his notion of "person" in bioethics. He sees brain death as a "convenient fiction"(Ibid., 235), which is no longer needed. However, the issue of whether or not bioethics is an integral part of ongoing life in our social daily living arises. People do not lead a laboratory day-by-day existence as an excised bioethics might well suggest. Nor are we simply a mixture of biology and biologically suitable ethics.

In sum, the spirit-soul as integral itself and having the power to integrate the body, provides a seat for consciousness that is rational, volitional and communicative for the development of the "biological-psychosocial-spiritual" person that Garcia sees us to be (Garcia, 36).

D. Mutuality of Consciousness and Brain Viability:

The conception of the human person as a unitary organism allows us to consider death as a "biological-psychosocial-spiritual phenomenon" (Ibid.). Along with this Garcia formulates a "consciousness-body as a

whole critical system" as a reliable base, which is rational as well, for the development of the unitary concept of person (Ibid.). This uses the same sense of mutuality as do Veatch and Machado. Garcia would build on Machado's acceptance of death as the irreversible loss of consciousness, both arousal and awareness, by linking this to the organism as a whole and finding a common neurological basis that supports this (Garcia, 36-37). I believe Veatch would find this acceptable. Garcia holds for the person as a whole concept rather than the body as a whole, which latter he sees as "unilateral" and insufficient (Garcia, 36). So do I.

The process by which the brain is brought to arousal needs to be reckoned. This includes an appropriate appraisal of its contribution to the content of consciousness. This has "philosophical significance" (Garcia, 32). I am proposing that the spiritual heart, or soul, created at conception will answer this concern. As the embryo grows it is integrated and integrating as a consciousness-body organism. Soul and chemical materials are immediately fusing into one. Physiological growth flowers into the anatomical brain and consciousness is developed. It further matures.

Consciousness is not limited to humanity, and Gert illustrates its power (Gert, 27). A monkey's head severed from its body in a laboratory setting, may continue to show signs of consciousness. It is not yet dead (White, et al. 135-9 in Gert, 26). This illustrates the integral unity of a spirit, even an animal spirit.

Hence, loss of all consciousness, even that in any part separated from the body, and permanent cessation of functioning as a whole must precede a recognition of death (Gert, 25). Thus is mutuality destroyed.

E. The Problem of the Human Spirit: Concerning the Biological-Psychosocial -Spiritual Development of the Human Person Followed by Death:

Our Spiritual Transcendence and Interactions:

It is possible to see the human person as individuated from the community. This contrasts with the rugged individualism that individuality, when over-stressed, can often promote (Habermas, 130-131). We suffer no loss of identity when we mix spiritually. We are invited to accept that the soul has a communicative capacity for other spirits. A capacity that resides in the soul and yet is formally distinct from it.⁴

This is the transcendence of everyday life, which makes us to go outside our own selves and whatever is the object of our immediate concern, which is our everyday knowing and desiring. It is unavoidable (Rahner, 14). Some people are afraid of this natural phenomenon, and fight

it instead of appreciating it. It has a parallel with our long sight and short sight. If we govern our focus, both long and short sight serve us well. If we accept and appreciate our spiritual communication with our fellow humans, it too, serves us well.

Rahner identifies something important about the human spirit in its "unlimited extent...in knowledge and freedom". This comes to us unavoidably from the themes of life which are our day by day experiences (Rahner, 15). In the interplay of humanity the spirit-soul is automatically activated by others and activates them. I am in the world and of it though I am spirit, could be said by each of us. We are engaged by the universal creation in an "essential relationship" (Puntel, 1619-20). Unless we miss the obvious we "attend to Being Itself" (Bonaventure, 44-45).

God is not at some infinite distance as filling in the gaps of life's difficulties but, rather, radically close (Rahner,15). God "is that which directly comprises the attainable goal" (Ibid.).⁵ The human person thus appears as someone self-responsible, self-determining, learning to live and love in a community of fellows and yet answerable to God and humanity. We are spiritually linked and this linkage is not totally destroyed by death. God is the common spiritual ancestor as Creator though of the uncreated order.

Mind and Spirit: The mind, which some people simply equate with the spirit, can be seen to be made up using our body-soul-spirit cooperative complexities. We communicate not only with words and body language but with the subtleties of our spirits. The spiritual factor, especially involving the "human psychosocial and spiritual dimensions" that Garcia specifies is quite relevant. Death has a definite spiritual relevance. Sensitive spirits, not all medical people, are often helped to recognize death by subtle spiritual change (President's Commission, 177).

Death shows the human person passing away from the physical world. We suffer a break in bodily life (Garcia, 31). The soul, as our responsible self, will need to survive death as will be seen.

F. Death as Event:

Death is the demarcation between the "process of dying and... disintegration"(Garcia, 37). In our beginnings the soul was able to form with the body an integrated and integrating organism, while this was possible. When the mutuality principle within the organism is totally negated, inside and outside the brain, then there is death (2 Garcia, 40).

At death, the unity of soul and body is destroyed. There remains only the withdrawal of the presence of the spirit. The sequence would be the opposite of the beginning. Thus, firstly awareness is lost, then arousal is

lost. The sundering of the integrated and integrating organism is complete. In relation to our living and dying, as people pass away from loss of both consciousness elements, the spirit lingers as if reluctant to leave. This phenomenon carries into a funeral where farewells are taken.

The withdrawal of a lingering presence of the spirit takes some time. This is further illustrated by the pregnant woman whose body is brain dead as distinct from the one in a vegetative state. Being brain dead she was able, on circulatory-respiratory support, to nurture the child in the organ that is the womb for a matter of days, but not weeks, whereas a PVS mother could nurture to term. (Lamb, 100).

G. Conclusion : Justice and Love in the Meaning of Life:

Emanuel suggests to us that the wonder of life and its mysterious ending better describes death (Emanuel, 56). This is certainly worth remembering. The unitary spirit-soul-body description would enshrine both justice and love. I would say that the soul would require immortality because of these functions. Without immortality justice would be hollow, and, without eternal life, any higher or deeper love would be an illusion. The passing away in death for the wise souls, learned in being loved and themselves loving in return, would be filled with hope (Gert, 25). Even the ancient pagan philosopher Aristotle was a man of hope and he held onto hope even through death. He was a community-oriented person and encouraged others to hope as well. In his will he ordered his executors to "set up in Stagira statues of life-size to Zeus and Athena, the Saviors" (Ross, W.D., vi).

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1. According to the Multi-Society Task Force on PVS, PVS indicates persistent vegetative state, which is a diagnosis. Should this become permanent after clinical observation, prognosis is made that it is then a permanent state of unconsciousness (M-S T.F. on PVS, 1501)
2. Peter and Mary are real "because individuated" they have *haecceitas* or "thisness". Their common human nature is "universal when objectified" (De Saint-Maurice, 342-5).
3. Garcia uses the term "encephalization" for the "process of arousal in man and hence its contribution to the content of consciousness" (Garcia, 32).

4. For a discussion of the formal distinction see De Saint-Maurice 191. It is at the same time an adequate distinction and an adequate non-identity. The soul is more than its spirit, which is distinct from the soul.

5. Scotus derives this philosophically from contingency, possibility and necessity (De Saint-Maurice, 176/7).

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