Of Squirrels and Pragmatism

In the lecture *What Pragmatism Means*, William James gives us what became one of the most famous examples of strengths of the pragmatic method. Instead of beginning with an argument, he provides a story. In this story, James and several of his friends are on a camping trip when a “ferocious metaphysical dispute” arises concerning the movements of a squirrel. A squirrel, the story goes, clings the one side of a tree-trunk, and on the other side a man tries to catch a glimpse of it, by rapidly chasing it around the tree. However, the squirrel moves just as fast as the man does, always keeping the tree between itself and his pursuer – and the man never sees the squirrel. So, why does James call it a “ferocious metaphysical dispute”? The campers ask: while we can concede that the man has circled completely around the tree, has he gone around the squirrel? Some of the campers say *yes*, others *no*, and an argument ensues over who is correct.

For James, the debate is semantic and not metaphysical at all. The solution is found in the *pragmatic method*, whose virtue lies in the clarification of terms like “around” and the implementation of operational definitions of what “around” means. Once an operational definition of “around” is secured, the debate naturally ends. The argument itself was born from the absence of clear terms to begin with. For James, most philosophical debates are a symptom of this lack of clear operational terms and thusly, once a gentlemen’s agreement is met concerning the proper use of terms, an argument can be settled.

However, shifting our focus from definitions of “around” to practical definitions of death, the question of the role of clear operational definitions reopens. For this paper, the squirrel in the story does not represent a definition of “death” which escapes the sight of reason, but rather it is the “practical” questioning of death which evades us. Can death be given an universalisable, practical or operational definition? This questioning functions as both the motivation for this paper and the pre-suppositional groundwork buried in the debates surrounding the medical definition of death.
The questioning of death *as such*, as we have seen in the presentations here at this conference, opens up numerous avenues and trajectories. There is no sense in beginning this project with some generalized understanding of death defined by this or that philosopher. This paper will focus specifically on some issues surrounding the *operational definitions of death* within the medical discourse of organ transplantation; the practice of which has greatly affected discourses of death in the medical field. Organ transplantation requires the harvest of *live* organs. Yet, because of the various legal and cultural restrictions placed on their acquisition, the donor must be considered dead before that process can begin. We then see a second presupposition at work here. Organ harvesting rests on a distinction between the individual’s *identity* and their biological *corpus*. Thusly, medical death becomes divided as well.

In recent years, the discussion of medical death has become an interdisciplinary debate. We might even say that the bio-political landscape of medical death is in a state of agitation. A brief glance at the literature reveals an opening up of the ethical, ontological, legal, epistemological, and physiological boundaries of the donor patient - multiple incisions made by multiple disciplines. For philosophy, organ transplant has often been the territory of *applied medical ethics*. However, I want to show that the philosophical richness of these debates move beyond our moral dispositions toward dying individuals, to the very limits of the “practical” and “operational” application of definitions of death. I will show that at the very moment when we have developed our most all-encompassing, practical and applicable definition of medical death, we have also reached a point when death’s ultimate arrival is deferred by the practice of organ transplantation. That is to say, any all-encompassing operational definition of death is incommensurable with the operational requirements of organ transplantation, and vice versa. The one makes the other impossible.

**Of Death**

First, a note on method: Our point of departure into the discussion of “death” is uncertain. From where and whence does “death” appear in medicine? It goes without saying that the (or *a*) definition of medical death has never been stable or fixed. Thusly, a broad historical narrative is not helpful to us at this point. In our everydayness, we treat death as an ending, a stopping, and a never-again-starting-up. The various positions in debates around medical death focus on determining what exactly constitutes this ending, and what the standard of measure for this
ending is. Undertaking a project which adequately paraphrases these positions is also a
logistically impossible task. Taking these positions as our point of departure would also be
problematic. It appears that the course or trajectory of this project needs to begin by first wading
through some of these materials, without giving any the distinct privilege of authority. Once I
have carved out a number of concepts around which to organize this plethora of content, we can
advance into the heart of the operational deficiency of “death.”

If medical death represents an ending, we would first assume that life is what ends, and
this response has ramifications that directly invoke our thematic questioning of the operational
definition of life. Is “life” the biological oscillations within the cells, in the tissues, the organs? Is
it represented by the whole body or just a part? Is it the heart or the brain, or just the brain stem
that is the seat of life? Or, is it none of these, but instead the Mind, the person, the subject, the
“I”, which stops, never to start up again? These questions open up a space for our own
questioning but they offer us little explicit knowledge of the level of discourse that we are
operating within.

If we begin with the assumption that death is an ending of life, where both “death” and
“life” are understood as objects of medical discourse, then the following iconic statement should
reveal some indication of where we should begin. Heidegger states in Being and Time that death
is the impossibility of my own possibility\textsuperscript{iii}, but we can see that it is difficult to mobilize this
notion at the purely ontic level, which is what is at stake in a mechanistic medicinal discourse. At
this point, I can make a very basic assumption: in the case of medical death, we privilege the
ontic over the ontological. At the ontological level, death is separated structurally from the
perishing of the body (which is our concern). So we are then beginning from a basic ontic
discursive level, where death is the stopping of something. We can now follow this conclusion to
its end: in regards to this “thing” or the “something-which-ends” are we speaking of life or a
life? That is to ask, is the object of medical discourse a unit of life (my life, a species’ life) or
something more ambiguous (life as a non-localized phenomena)?

In 1968, a committee met at the Harvard Medical School to re-evaluate the definition of
medical death. What was known as the “classical definition of death” had meant the cessation of
respiration and heartbeat. After this meeting in ’68, “death” was upgraded to the “extended
definition of death”. This new definition inscribed death as an irreversible coma.
The debate still remains open and focused on the accuracy of both of these definitions. Some elements that lead to this re-inscription of death are important to us here. The “Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death” released after the meeting gave two main reasons for the change in definition. The first reason is the increased success in medical resuscitation of severely injured individuals. Having your heart stop beating no longer meant you cannot be resuscitated or come back to life. In this instance life has the ambiguous quality described above. You come back to life, where life refers to a state, not something possessed or individualized. The committee commented that this change also remedied the archaic misunderstanding that the heart was the central organ in the body (the locus of all vital forces). The more contemporary reasoning shifts the focus from the heart to the brain, from the body to the mind, or from the corpus to the identity.

The committee’s second reason for the change operates as a preventative measure against the controversy and scandal concerning organ harvest. This aimed specifically at garnering positive attitudes from the population within this new ethical terrain. “Obsolete criteria for the definition of death”, they wrote, “can lead to controversy in obtaining organs for transplantation”. It is easy to see how the pervious understanding would make the acquisition of organs a tremendously difficult task because by those standards organ harvesting is vivisection – the dissection of the still-living body. When the locus of life and death is shifted to the brain, the body lives but the individual does not.

Forty years later, a 2008 study in the American Journal of Transplantation, set out to survey the successes and failures of organ donation and unitization between 1997 and 2006. They concluded that while the number of organ donors went up (by 24%) because of the work of promotional groups, further measures had to be taken to further increase donation rates. These suggestions were prompted by an overall decrease in the number of viable organs recovered and transplanted per donor. During the period studied, individuals were willing to donate, but medical advances were not yet able to insure the continued viability of those organs after harvest. Other suggestions outlined a possible reimbursement programme for living donors giving organs such as kidneys.

What concerns us here is what the authors call “the expansion of the donor pool by increasing use of expanded criteria donors”. This “expansion” is precisely the opening up of the
disciplinary boundaries of the organ-giving individual. There are three classifications of dead individuals within the “donor pool” mentioned in this report: the first is the standard criteria of death, the second is the expanded criteria, and the last is a category called donation of cardiac death. The inscriptions of death at play here are defined respectively by several kinds of cessation: respiratory-cardiac cessation (body-death), high-function brain cessation (or cerebellum death), and full-function brain-death (total brain-death). The employment of multiple and simultaneous definitions of death begs the question within the medical community whether or not it is time to, again, rethink the definition of death.

Let me introduce my first point now: If we take the classical and extended definitions of death as representing two comprehensive positions within this debate, we read the framing of medical death as the presupposition of two Cartesian foundations. The classic medical definition frames death as the death of the Body and the death (or escape) of the Soul. On the other hand, the extended definition of brain-death points to, as a chemist friend of mine said, the disappearance of the person. In Cartesian terms, this is Mind or Soul death, where the heart remains beating, the Body remains living. In widening the donor pool, we witness the employment of both sides of the Cartesian duality in the arena of medical death. We see “death” as an assemblage of operational definitions of death which oscillate, resonate, and repeatedly replace each other.

What follows are encounters with three thinkers. I begin with Anna Bergmann, who offers some general (sometimes too general) commentary on why there is a cultural controversy surrounding organ transplant. I then move on to Manuel Delanda, and Jean-Luc Nancy who provide different trajectories into problematics of locating death within the individual. Byway of a discussion of nested sets of biological cycles, Delanda assists us in describing how life is constructed temporally and spatially in such a way that it cannot be designated as the sole property of the brain or Mind. This problematizes both the designation of the mind as the locus of a life and the body as the boundaries in which a life is enframed. Nancy helps us by problematizing the concept of “a life” and “a death” through a discussion the experiential relationship with one’s own body after transplant surgery. Taken together, we can construct the contradistinction that lies that the heart of an all-encompassing definition of medical death.

The Double-Cartesian Position
In her short article “Taboo Transgression in Transplantation Medicine”, Anna Bergmann claims that organ transplantation is the logical development from the 16th century revolution in anatomical study. The reason why the re-definition of death is so troubling, she tells us, is that it violates so many cultural rituals and taboos concerning life, the body, death and personhood. Bergmann explains that for the extended definition, the personality theoretically evaporates after brain death and therefore the justification of organ harvest follows from a practical imperative to make use of the deceased’s materials: “brain-dead donors really are not persons [according to this reasoning] but are corpses, actually as well as legally.” Interestingly, she informs us that friends or relatives of donors, along with medical staff, still affectively conceptualize death by the classical definition. While the donor may be brain-dead, body death is still seen as authentic death and for this reason, mourning cannot truly begin until the donor’s “second death.”

Bergmann’s brief analysis is helpful for us because it gives us some clear reasons why organ harvesting creates such a buzz within the disciplines. She concisely reflects on the intersections between organ harvesting and many cultural taboos such as murder, cannibalism, vivisection and the breaking of the Hippocratic Oath. She concludes that our contemporary cultural understanding of death still contains many “elements of magic”, which cause us to be uncomfortable with the metaphysics and ethics of organ harvesting. Her analysis is mostly accurate in its considerations of taboo, but she ultimately ends up interpreting these taboos through the lens of a teleological progress. For her, these taboos ought to be overcome because of the logical and historical progressions of anatomical medicine. She seems willing to dispatch with the older “metaphysical” understandings of death without considering whether or not the extended criteria for death follows suit. For instance, the “old traditional” model appears quite active within the medical practice, precisely within what I have called the double-Cartesian model.

Why do we entertain this double-Cartesian position in organ transplantation here in the philosophical context? Bergmann rightly tells us that methodologically, transplantation rests on a presupposition that the organism is the composite of component parts, and that these parts are exchangeable. The medical discourse arises from the mechanistic philosophies, and reductive anatomies of Descartes, Harvey, and Vesalius, all of which contain the notions of the conscious subject and the mechanical corpus at their very heart of hearts. An attempt to re-interrogate the Cartesian model within the definition of death would seem to require a complete re-interrogation
of the intrinsic statements of medical discourse. Such a task is impossible here. Let us instead, in the name of practicality, in the name of the operational, leave Descartes enacted in order to push this double-definition of death, of the standard-body and extended-mind criteria, to the very limits of their practicality by asking: how can we create a definition of absolute death, an operational definition that provides little to not interpretative slippage?

Operational death is a stopping. And, in an absolutely practical operational definition of death, this stopping is an absolute stopping. Why my insistence on the practical death as a totalizing death? This question, posed in a stance of ignorance, points toward the essential element in an operational definition of death, the cessation of life. At first, we are compelled to place death in a para-antagonistic relationship to life as its ultimate other or mirror, as a binary coupling - where one is, the other is not. But this becomes problematic when we ask how life at the level of the operational can be defined. How do we get a measure on it? If we turn to Deleuze scholar Manuel Delanda, we see how the criteria for body-death is problematized by a formulation of life based on temporalities generated by a multiplicity of non-linear “life cycles”.

Temporal levels of life: where is a life?

Delanda’s 2002 book Intensive Science and Virtual Philosophy attempts quite a controversial task. Delanda intends to reconstruct Gilles Deleuze’s philosophy for an audience of scientists and analytic philosophers using scientific and mathematical materials. For our purposes, we want to look at one particular chapter from that text entitled, “The Actualization of the Virtual in Time”. In this chapter, Delanda introduces us to Arthur S. Iberall’s 1970s research on nested temporal oscillations. To understand the significance of this work for our purpose we must consider the connection that links temporal scales with spatial scales.

Consider the life and death of James’ squirrel. This life is just one kind of life cycle. Reproduction, menstruation, mastication, heartbeat, breathing, and cellular regeneration are all kinds of cyclical processes that constitute life. At a more abstract level, the life cycle of an individual organism - its life and death - is of a different temporal scale than the life cycle of the entire species. Squirrels, in this example, are the component parts of a species, and both have differing temporal durations. Yet, these two levels are not totally separate from each other. The larger life cycle of the species (the “birth” and extinction of the species “squirrel”) contains within it the multiplicity of smaller life cycles of the individual organism (like a single squirrel’s
birth and death). We can even speak of larger temporal cycles, like those of the squirrel’s environment, ice ages, or the oscillations of the births and deaths of stars. We can also look to those cycles which are smaller than the organism, within the levels of organs, tissues and cells. A squirrel, because of its smaller-scale life cycles, has a temporality that appears fast to us, whereas for them, we would appear to live indefinitely.

With Delanda’s treatment of this non-linear temporality, we see that continuities develop within these various spatio-temporal levels. Delanda calls these “nested sets of cycles”\textsuperscript{xi}. Just as much as individual life cycles are component parts of a species, individual cells are the component parts of the organism, so that “cells, organisms and species [themselves] form a nested set of individuals at different spatial scales”\textsuperscript{xii}. I’ll quote Delanda here at length:

[T]o think of species, organisms or cells as possessing a single characteristic spatial scale is too simplified. [B]etween the cells and the organism there are a variety of spatial structures (tissues, organs, systems of organs) bridging the two scales... This means that actual time, rather than being a simple nesting of cycles, may include overlaps between the multiplicity of temporal scales associated with each level of individuality... We can assign [...] a particularly prominent time scale to each individual level, such as the cycle which measures the maintenance of their identity: the length of time after which all (or most) of the individual cells in an organism have been replaced by new ones without affecting the organism’s identity.\textsuperscript{xiii}

When looking at death as the end of \textit{a life} through the lens of this non-linear temporality, and if we believe Delanda, we must ask at what level of the organism, or more specifically at what level of life, does \textit{a life} or a measurement of life occur? Is it at the level of cells, tissue, organs or nervous systems? If we take the extended criteria of brain-death as our practical definition, the nervous system, more specifically the brain stem, becomes the location of a life, and the life cycles that occur at the level of tissue and cells become separated from \textit{one’s life}.

Debates arose immediately following the implementation of the uniform “brain-death” definition (the cessation of higher brain functions, not just the brain stem) when some neurologists pointed out that:

\textit{Isolated brain cells could be perfused and continue to live even though integrated supercellular brain function had been destroyed. When the uniform brain-death definition of death said all functions of the entire brain must be dead, there was a gentleman's agreement that cellular level functions did not count.}\textsuperscript{xiv}

On the other hand, if we look at cardiac death as the referent for a practical definition, we have singled out only one body oscillation as the site of one’s life (the oscillation of heartbeats), while making another gentlemen’s agreement that the numerous life cycles still in process are
insignificant. Even in Delanda’s explanation, the closest thing we have to a *temporal identity*, a measure, is the time it takes for all the cells in our body to be replaced by new ones. Yet, this still occurs within a *life*. Our identity in respect to a temporality of life isn’t to be understood through what *doesn’t* change in us, like a soul, but rather by what does change, and the kind of time that these differentiations generate amidst the cycles of cells. The totality of my own life, from birth to something like a death, as a measurement of time must therefore be seen as an assemblage of various temporalities at diverse spatial levels.

When an organ is transplanted, it cannot be dead itself. At the level of the organ, the life cycles at the level of tissue and cell must continue in order for the organ to be viable for transplant. The donor’s life, their totality as an assemblage of these process oscillations, would be over according to the classic definition of heart cessation. He would also be dead by the extended definition for brain-death. But what are we to make of these life cycles that continue *within* the liver? According to our double-Cartesian position, his liver is mechanical component, but is it still part of a *life*? If so, is it his or someone else’s? If his life is in fact over according to our current definitions of death, then no, it is not. But how then do we understand a liver that is not connected to a *life*, wherein life cycles remain in process?

*There’s a stranger in my house: where is my life?*

Jean-Luc Nancy wrote a short paper after his heart transplant entitled *The Intruder*, which explains his experience through the notions of estrangement and strangeness. It is in this text that the *identity of a life*, of a personality, becomes problematized by organ transplantation. He addresses the problems of identifying a *life*, but also formulated it in the term’s assemblage. His old heart, he tells us, becomes a stranger to his own identity in the moment when he is aware that he is ill. Nancy tells us that normally one identifies the wholeness of their body through its being unnoticeable. I am a totality because I do not notice it being otherwise. When his heart begins to fail it stops being nothing, stops being properly imminent, and gradually begins to separate itself from his “identity”\footnote{v}. He finds estrangement also from his new heart, but not in the same way. It is “half-hearted”, he tells us\footnote{vi}. It only partially belongs to him. His identity is doubled by the presence of this stranger, which came in from the outside, and now dwells within him. What is a *life* in these terms? What is the life that was saved by the transplant?
From his own experiences, Nancy writes: “[At the very least] it turns out that [my life] in no way resides in ‘my’ body; it is not situated anywhere, not even in this organ [the heart] whose symbolic renown has long been established”. He continues:

A life “proper” that resides in no one organ but that without them is nothing. A life that not only lives on, but that still lives properly, within the three-fold grip of the stranger/the foreign: that of the decision [to have the transplant], of the organ [from a stranger], and of the transplant’s effects [Of possible rejection of the organ by the body and also the reject of the body by the organ, along with the induced weakness of the immune systems to try to combat both].

For Nancy, the transplant complicates the strict mechanistic understanding of the composite body privileged by medical definitions of death. While Nancy’s transplant was successful, the heart does not become his heart. He is unable to identify with it. A division opens up his identity which cannot be closed and is caused by the introduction of the strange into the familiar. My life, commonly understood as being synonymous with my identity, appears to us, as it does with Delanda, as an assemblage. The “I”, Nancy tells us:

[Has clearly become the formal index of an unverifiable and impalpable system of linkages. Between my self and me there has always been a gap of space-time: but now there is the opening of an incision and an immune system that is at odds with itself, forever at cross purposes, irreconcilable.

Death in Nancy’s formulation is the absence of life, but death is never isolated from life, never practically separate. They are interwoven into each other and intrude into each other’s core.

The organ transplant, in this case, is not only the transplantation of the organ, but at the level of tissue and cell, it is the transference of life cycles. The necessity of the living organ, the eventual death of the donor, and the interrupted death of the recipient, creates a network where life and death are “shared out”. If we understand death as a stopping, an interrupting of being, and life as a transferable nested set of life cycles or oscillating processes, how do we get an operational definition of death from these biological and experiential testimonies.

Conclusion/Cessation: The Problem with Good Definitions

After considering Delanda’s and Nancy’s positions on the temporal and personal aspects of life transference, we again postulate an absolute operational definition of death as the cessation of all life oscillations, the ultimate cessation, as the only avenue for insured pragmatic efficiency: Dead for damn sure. This clarification of the terms of death would seem to solve the problem of ‘too many kinds of death’. However, the most practical operational definition of medical death would be the most impractical, inoperative definition for organ transplantation.
itself. Here I restate my claim that a totalizing operational definition of medical death is incommensurable with the discourse of organ transplantation. This is true for the following reasons:

The success of the organ harvest requires that both “death” and “life” be present within the boundaries of the individual. They must be legally dead as to release a number of individuals from positions of blame: the doctor is released from the Hippocratic Oath, the surgeon is released from the accusation of murder, and the conscience is released from its socio-cultural-religious taboos. Yet, life must remain present in the flesh as the primary condition for organ harvest to occur - the organs must be alive. Both these are required, yet they are operationally contradictory to each other. They deny death as a totalizing designation.

Beyond this necessary contradiction, we have pushed the practical requirements of an operational definition of death to their limits because the implementation of totalizing death also negates the possibility of the organ donor’s own death. The donated heart that continues to live as the intruder within Nancy is literally a transference of nested life cycles from one assemblage to another, in which it is never fully assimilated. Thus, the donor does not “die” absolutely because of this sustained nest of life cycles within the donated organ. There is a remainder external to the donor’s corpse which does not die.

What to make of this predicament? I would like to conclude with some quick remarks. We have seen in the Organ Donation and Utilization progress report that organ transplantation benefits from the multiplicity operational definitions. Recall the “widening of the donor pool” that resulted from the double-Cartesian position “have led to unprecedented numbers of donor consents and organ recoveries”xxii. Transplantation requires a more complex practicality, and a means of determining at what point the harvesting of organ is acceptable. To put it crudely, the more definitions of death, the numerous individuals that can be defined both “dead” and “viable” for donation. This is why applied ethics and organ transplantation make such terrible bed fellows. Applied ethics has a never ending controversy to discuss, because, as Bergmann tells us, organ transplantation always pushes against the ideologies of cultural taboo. Taboos do not disappear, as she seems to imply, but rather taboos transform. The ethical policies and laws concerning organ transplantation must be rewritten again and again, because applied ethics is obliged to work within a very strict, self-conscious, socio-historical situation.
Philosophically we have some rather strange choices. Two oppositional routes come to mind, though I’m sure that they are not the sole routes of exit. We can advance a hard-line operational definition of absolute death, the cessation of life at all biological levels, which would mean abandoning the requirement of “death” in the practice of organ harvesting and transplantation. This would obviously invoke ethical and policy debates. The other choice seems to be this; we must either accept the blurring of this classic life/death binary or abandon it altogether.

There is much more work to be done with the questions outlined in this paper, none of which have been fully answered here. I hope rather to have opened up some of the richer areas within this discussion, which move beyond applied medical ethics, into the very networks of death.

**Works Cited**


*This copy was translated by Susan Hanson in 2002 for Michigan State University Press. This copy was procured digitally from Project Muse.
The tasks and goals of the paper are complex, difficult, and require more time and space than I have allotted for them here. I have done my best to write is paper with a conversational and causal tone in hopes that this work will be digestible for both readers of philosophy, and for other readers interested in these debates around the operation definition of death within organ transplantation discourse. - JPH


Ibid.


Ibid, emphasis mine.


Ibid, p. 54.

Ibid, p. 52.

Ibid, emphasis mine.


Ibid, p. 4.


Ibid.

Nancy, p. 10.

Nancy, p. 6.

Nancy, p. 8.

Sung, R.S., p. 992