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The Temporalities and Spatialities of Death, Dying, and Heart Donation

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Abstract

Contemporary biomedical technologies surrounding deceased organ transplantation raise urgent issues regarding the temporalities of the living and the dead, the disturbance of distinctions between self and other, and the question of absence and presence. There is no simple and stable futurity, but rather a host of ontological, epistemological, and ethical issues that trouble both organ recipients and donor proxies. My claim is that heart transplantation in particular marks a fluid assemblage and intertwining of self and other at both the biological and ontological level, where personal identities and the conventional limits of life and death are deeply problematized. Nonetheless, those disturbing and inescapable challenges to conventional binaries are rarely explored within the authorized narrative of the clinic.

In place of the techno-utopian promise to recipients of a restoration to the self, a reconfigured imaginary of heart transplantation might signal an entry into incorporeal co-existence in which the personal event of the donor's death marked the revitalization of life in other forms. Welcoming the enmeshment of living and dying does not diminish present suffering or grief but suggests another dimension where the breakdown of binaries no longer disturbs, and the concept of life escapes its temporal constraints to point towards the horizon of a flourishing future.

Keywords

heart transplants, temporality, death, life, donation, absence, presence

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In the contemporary era in which biomedical technologies ensure a high degree of success in extending life, not least through organ transplantation, the changed temporalities of the living and the dead, and the disturbance of many other related binaries, such as self and other, absence and presence, are often overlooked. The issue is that rather than simply assuring a future, the *clinical* success of a transplant intervention—which is uncertain but very likely—raises a plethora of ontological, epistemological, and ethical issues for both recipients and donors (and their proxies). My focus in this article will be on heart transplantation as the site both of a radical and irreducible intertwining of self and other, and one where the conventional limits of life and death are deeply problematized. Other forms of transplantation may entail some similar complexities, but it is primarily in the field of heart donation where the donor is always deceased that the most disturbing questions become inescapable. While we understand that the newly deceased person can still contribute as the source of biological material though a range of transplantation technologies, involving on average seven or eight discrete organs from each donor, what is rarely explored is the assumption of an absolute break between the living and the dead. Nonetheless that apparently self-evident binary distinction between the presence of living and the absence of death which underlies a long-standing understanding of human existence has become increasingly insecure as biotechnologies seek to intervene into processes that once seemed natural and inevitable. At both the beginning and end of the conventional life span, the moment at which life can be said to exist is highly contestable.

During the many years of my involvement with two major Canadian research projects into the experience of heart transplantation our interdisciplinary team completed multiple video interviews with both recipients and donor proxies.[1] On each side, the timing of death was of crucial importance, albeit in very different registers. For recipients faced with their own imminently approaching demise—and that is the main criteria for inclusion on the waiting list—the death of the donor is a necessary facet of their own survival and it produces, not surprisingly, a complex mix of relief, gratitude, obligation, and guilt. Initially, many who have received a transplant claim not to think about the provenance of the organ, but in interview the overwhelming majority (up to 80%) expressed significant disturbance about their relation to the donor in which the other—the deceased donor—seems to persist within the self as what might be called a spectral presence. Recipients' accounts of living on as a direct result of deceased donation brings life and death into an unwelcome focus that undermines the public interest in a simple—albeit heroic narrative—of giving or receiving the so-called gift of life in which both sides of the transaction can be celebrated for their courage. As is well known, there is a persistent shortfall in available organs for transplantation with endless public campaigns to highlight what is taken to be the unambivalent good of donation, as well as a growing number of jurisdictions—including Austria, France, Columbia, Norway, Italy, Singapore, Nova Scotia, Spain and the UK—in

which post-death individuals are classed as having given presumed consent unless they otherwise have registered their desire not to donate. The bioethics of such moves are much discussed (Costa-Font et al. 2021; Prabhu 2019) but fail to address many of the issues around life and death, self and other, that I go on to outline. The question of how to ethically arrive at a sustainable rate of donation should not be allowed to obscure the deeper philosophical ambiguities.

I want primarily to explore the side of donation where the decision to offer the heart and other organs usually falls on a family member who must act while the donor is apparently still living, albeit close to death. With the exception of Austria, medical staff will usually defer, even in cases of presumed consent, to the wishes of the intending proxies, though for many faced with the urgent request for consent there may be little prior knowledge of what the prospective donor might have wanted. Once a decision to donate has been made, nothing can progress until a medical determination of brain death has been made. Even then, respiration may be continued until the heart and other organs can be removed and transported on ice within a limited time period to the site of implantation into another—the recipient—who is equally marked as dying. Unsurprisingly, proxies may experience some unresolved uncertainties and incongruities that render the process highly emotionally disturbing, although the attendant biomedical professionals are likely to display no doubt about the moment of "natural" death, after which point any life support can be terminated in line with clinical and logistical needs. Many donor proxies feel acute distress and will frequently question if the body before them is really dead. In other words, has that person's embodied self truly reached an end?

Although many donor families do overcome their initial hesitation, there are sometimes some disturbing and highly visible anomalies that trouble the distinction between life and death. For example, even after the machinery that prolongs respiration and heartbeat has been disconnected, a putatively brain-dead body may show strong signs of animation, including at its most disturbing, the so-called Lazarus effect, explained by biomedicine as merely a spinal arc reflex (Taskin 2017). As a biophilosopher, I wonder why such phenomena, which though rare in "death" are an intrinsic part of everyday living, are now dismissed as having no significance. Indeed, without such reflexes we would suffer all sorts of unnecessary trauma to our embodied selves. But in Western biomedicine, it is brain function that reigns supreme. My hesitancy become clearer in the historical context of what constitutes death for a prospective heart donor. Until the 1960s death was defined as the failure of the cardio-respiratory system such that the permanent cessation of breathing was the unquestioned mark of death. With the development of the artificial ventilator, however, a dying patient could be stabilized in order for the heart to continue beating for an extended period. This technological intervention clearly created a moral complication for organ transplantation in that it was no longer certain when, or if, the potential donor

was actually deceased. Partly in response, the definition of death was switched in 1967 to *brain* death, which appears to offer a more secure assessment even when the body still shows a range of vital signs. In other words, death was reclassed as synonymous with lack of brain function—although recently a more sophisticated standard of cardiac death, now called circulatory death, has been reintroduced.[2]

In 2008 [published 2011] a refined definition put out by the President's Council on Bioethics in the US clarified that the destruction of the brain constituted death because it indicated that the patient could no longer engage in "commerce with the surrounding world." What that new justification actually intends is far from self-evident, and many families who support those on life support machines or in persistent vegetative states for extensive periods would claim that there *are* forms of rudimentary communication.[3] The authorized discourse of biomedicine is not known for its embrace of indeterminacy, however, and such families are habitually characterized as mistaken at best or hopelessly deluded (see Shah, Kasper, and Miller 2015). Perhaps what is at issue is a serious mismatch between the timelines of clinical practices such as transplant surgery, which is strictly linear, teleological, and highly time sensitive, and the temporality of personal embodiment. In any event, the status of deceased donors—any "dead" body really—is problematic in that they are both enduringly material and the source of further of life, and non-living, a spectral presence that haunts the sociocultural imaginary. Persistent narratives of the donor living on after transplantation are a familiar staple of Western literature and film even though both donor proxies and recipients may be cautious in aligning their own lived experiences with what many think of as merely dramatic license. The ontological discomfort that accepting patient accounts would entail is simply displaced to the realm of fantasy where the boundaries between the living and the dead, and between self and other are temporally and spatially fluid.

It is in the donor situation that the perception of passing time is at its most intrusive and discordant. While clinicians must aim for a speedy procedure, bereaved and possibly distraught relations are given little time for reflection on their own misgivings and anxieties. The material I refer to is taken from the Gift of Life Analysis (GOLA) qualitative study of families who had consented to the donation of organs after a declaration of the donor's brain death. None overtly queried the clinical terminology that categorizes brain death as distinct from the cessation of cardiac activity, but the absence of a visible moment in which life had ended often proved extremely challenging for donor families. "I think he died in front of me," said one mother, only to be told that her son had already been dead for several hours, while a grieving father remained persistently unconvinced: "His death certificate says April 30th, I believe it was May 8th." For many, the sight of warm, breathing, and at least minimally reactive body receiving ongoing "care" made the concept of brain death hard to accept. As Kathleen Fenton bluntly puts it, "society as a whole is not completely comfortable with the idea that a warm,

pink patient is actually a corpse" (Clarke, Fenton, and Sade 2016, 2056). It is the removal of the respirator and the subsequent arrest of the heartbeat that finally triggers acceptance, though an evolving technique—called heart beating transfer—now averts the need to stop the heartbeat at all. Ventilation is maintained until the organ can be removed and placed in a machine that perfuses it during transportation such that the graft continues beating throughout. In consequence, cardiac death per se never occurs. For clinical staff the "now" of the life/death binary is what makes the whole procedure ethically acceptable, and I wonder if the new technique will disrupt such certitude once it becomes more widely used. For donor families, the anguish of uncertainty is already apparent.

Several of the twenty-two donor proxies interviewed for the GOLA project expressed little discomfort in giving their consent, and for a small number it was a seamless transaction, both ethically and practically, that raised few, if any, ontological anxieties and only limited speculation on the meaning and temporality of death. One robust eighty-year-old woman who donated her husband's organs told the interviewers, "I looked down at him and said that's not my husband…the body is just cells…they're not the person." Many welcomed the opportunity to donate, like the parents of a deceased daughter, who remarked, "We were a little bit on pins and needles to make sure it happened." For the majority of respondents, however, the necessarily time-sensitive process of being asked for consent was experienced as highly disturbing and they were compelled to suppress their misgivings. Whatever the actual sensitivity of the attending healthcare staff, the experience of the time leading up the removal of organs was hard to navigate. As one woman put it, "It was a nightmare. I know they try do it quickly…but it was such an emotional turmoil those three days." Other equally distressed recollections, which I have recorded elsewhere (Shildrick 2020), include two sisters who likened the request for donation to the approach of "a pushy used car salesman," while a bereaved husband said it was "like seagulls circling." The sisters had the disturbing experience of seeing their "dead" brother's legs still twitching and a tear falling from his eye, and six years on, there was still unresolved conflict within the family about the decision to donate. Another mother expressed the frustration and anger she had felt at the time of her daughter's dying: "she looked like she was just asleep," so "I just wanted to punch them in the face…That's your child being carved up to be doled out to other people." The profound doubts around the issue of consent are not easily settled and several parents spoke of invasive dreams. As one interviewee put it, "I was having nightmares…when they were removing his heart and eyes, he was screaming"; while another mother had an intensely visceral reaction: "I felt someone was surgically removing *my* heart." Clearly the necessary provision of life support technology that maintains the functionality of organs during the quasi-death period creates an epistemological disturbance for those who are asked for consent that does not end once the transplantations have been completed.

The scenario is further complicated in that the setting and expectations around the procedures are almost entirely situated with a Western value system that has long downgraded the importance of embodiment and the significance of affect and emotion in favor of rational action. In a more philosophical vein, what Derrida (1973, 1974, 1981) called the metaphysics of presence shapes and pervades the discourse of death, dying, and transplantation to the exclusion of that which is contingent and complicated. Absence is ignored or at least marginalized, giving a position of priority to temporal immediacy and the nowness of presence. Derrida of course wants to deconstruct the putative binary such that the concept absent presence—the trace of all those things that are suppressed—becomes the route to a very different understanding of what should/must be taken into account. That trace reappears in his later work in the guise of hauntology (Derrida 1994), which proposes that the here-and-now is not simply a relatively stable interval between time past and present. Organ transplantation is a fertile ground in which to witness deconstruction at work. It is not simply futurity that is an unstable horizon—as the editors of this Special Section recognize—but the whole span of temporality and spatiality as well. The empirical component of the GOLA research revealed the depths of supposedly non-rational responses but had limited exposure to alternative systems of knowledge production, either philosophical or religious. Even Christian spirituality—which might have offered a very different take on the temporality of life and death—was not a prominent feature.

No major religions directly outlaw heart transplantation, though many survey responders remain under the impression that their religion opposes transplanting organs from brain-dead donors (AlHabeeb et al. 2017). More significantly, as summarised by Abdeldayem et al (2016) there may be widespread doubts about the finality of brain death—expressed in some Japanese, Chinese, and Jewish cultures—that restrict take-up. Similarly, the question of bodily integrity after death as a necessary condition for resurrection is a factor across Islamic, Hindu and Confucian cultures, though such systems of thought are rarely universal (Oliver, Ahmed, and Woywodt 2012). There appears, as well, to be very little research exploring Indigenous attitudes to and beliefs about transplantation, although the work of Rhonda Shaw and Robert Webb (2021) with Māori communities offers new insights. As Shaw and Webb warn, there is always a danger of generalizing, but their research appears to show that although living and preferably related donation, as is often the case with kidneys, is relatively well established, heart transplantation—which necessarily involves donation from a deceased stranger—raised complex problems of acceptance, despite a high prevalence of life-ending cardiac disease in Māori peoples. The reason, as Shaw and Webb suggest, may lie in the holistic Māori worldview in which the body is never that of a detached individual but rather a vital link in an ancestral chain that ensures the genealogical continuity between the past, present, and future (see Rameka 2016). The donor proxies and recipients interviewed for our team's

research were, with few exceptions, Western-identified, but a handful illustrate the importance of taking account of ethnic differences. One Indian Muslim heart recipient, for example, insisted with a strong degree of pride, "The heart belongs to that person, so I'm not alive…he's alive in the shape of me,"[4] demonstrating how other cultures may generate very different responses and have other psycho-social imaginaries in play.

On the donor side, the interviews with the parents and sister of a young First Nations man who had died in an accident was very telling. The Indigenous father strongly believed that both the deceased donor and the organ recipients would be enabled to live on through donation but was initially very conflicted. In the days-long gap between the declaration of brain death and donation, the father sought out spiritual guidance from the natural environment, such as coming across a seemingly dead but still sprouting tree that to him signaled the entanglement of life and death and convinced him to give consent. After donation, both parents saw their son's continued being-in-the-world as a matter of everything being interconnected and sustained over time without regard for the conventional teleology of life and death. For them, the donor is both a part of the recipient but also everywhere, outside any specific temporal location. Though in mourning, the father and sister both continue to feel a powerful sense of the young man's persistent presence in their own lives and believe he has communicated through a spirit guide. The Indigenous imaginary that underlies that reaction is clearly very different from the Western mainstream and precedes the kind of interconnections that Deleuze and Guattari (1987) call assemblages.[5] In Deleuzian terms (1990), dying is both a final threshold within a conventional time span and an atemporal process that goes beyond the putative binary of life and death. In other words, personal mortality does not mark the cessation of being.[6]

No such reflection on the meaning of death is apparent in the literature put out by Canadian organ procurement organizations (OPOs)), which consign and transport viable organs. Instead, their highly upbeat publicity aims at an unproblematized promotion of increased donation in which donors—and their proxies—are driven by altruism. The actuality of death or dying is assiduously covered over in favor of what Alison Kafer (2013) calls a "curative imaginary" in which recipients at least have a restored and buoyant future and donors have made a positive contribution to the good. Even though in the case of heart transplantation the donor is *always* deceased, that troubling aspect is absent from the literature which stresses only giving and receiving the so-called gift of life. All this is very comforting for donor proxies reflecting on their decisions to consent to the donation of vital organs. As intended, many agree that giving the gift of life *is* an act of altruism expecting no reward—beyond perhaps a therapeutic lift—and that organ donors and their proxies are inherently beneficent. As one parent put it, "He helped a lot of people. It gave a reason"; while a putatively unemotional couple declared, "Whatever could be used, should be used," adding, "we were very much in favor of the

scientific research." Not surprisingly, many other donor proxies are invested in the hope that donation somehow prolongs the essence of their loved one, while also voicing a deep concern for recipients. Should the recipient—and it is usually the heart transplant that is the focus—fail to flourish, a significant number indicated that they would be retraumatized. But as the GOLA interviews illustrated, it is rarely a simple transaction. It is noticeable that the majority of proxies—and many recipients too—continue to refer to transplanted organs as belonging to the deceased donor, and as having an agency independent of the recipient. As one respondent very characteristically expressed it, "Even in someone else's body, D., you're doing a better job than people's own kidneys." Despite the reductive language of the transplant clinic which might serve to sidestep ambiguity, there is an insoluble tension between the emotionless discourse of spare-part surgery and the multiple affective and symbolic considerations at stake.

The ubiquitous concept of the gift of life is a highly complex one that mobilizes many other important connotations, not least the belief of many donor proxies that not only do individual organs sustain life in another but that the deceased donor somehow transcends death. Indeed, the issue of living on is central to donor family thinking, and for those grieving it provides a rhetoric of hope to offset their more negative feelings. Though OPOs explicitly encourage the discourse that the gift of life has therapeutic effects that might mitigate loss, their gesture towards the notion of living on is supposed to be purely symbolic, or references only the recovering recipient. In other words, a dying and then deceased donor is superseded in a stable temporal sequence by the putatively restored life proper to the recipient alone. It is as though organ transplantation were simply, or at least primarily, a biological practice which should arouse no ontological considerations. Nonetheless, the keenly held beliefs of both donor proxies and of recipients indicate something else. At the entrance to the ambulatory transplant clinic at the Canadian hospital at the center of the research, what is called the Donor Wall records a plethora of messages, such as "Mike: His gift of organ donation ensures he lives on through the lives of others"; "Joey's love of sharing motivated his family to donate his organs. The love Joey had within him surely lives on in his recipients"; "in a way [Sam] is still living while healing other lives."

Where for the clinical professionals, the success or failure of the procedure is a matter of objective biomedical measures, the longer-term emotional impact of the decision on the lives of donor families and recipients alike tells another story in which the clear distinction between life and death and between absence and presence is lost. In some magical sense, the necessary death of the donor is annulled and they are not so much incorporated into an other as occupies a new location where something of the self can endure. As the daughter of a donor father put it, "He lives on, he got to share himself with strangers," and another previously sceptical proxy reflected, "Maybe there really is more to this life after

death than we know." It is difficult to escape the conclusion that living on refers to the survival of both the recipient *and* the donor.

There are very two distinct ways in which the felt experiences of both donor proxies and recipients speak to something ignored by the authorized narrative. First, and staying with the symbolic side of things, Marcel Mauss—the pre-eminent figure in gift theory— claims that any donation exceeds its mere materiality to figure something intrinsic to the giver. As he writes, "one gives away what is in reality a part of one's nature and substance" ([1954] 1990, 10), and that, for a recipient, "to accept something from somebody is to accept some part of his spiritual essence, of his soul" (12). Coinciding with the instinctive feelings expressed by proxies, the work of Mauss suggests that some essence of the gift giver does live on in another, as is sometimes explicitly recognized by the recipients of donor organs. Except in popular culture, the more likely Western intuition, however, is that the uncanny yet persistent presence of the other is felt through a perplexing awareness that one's *own* embodied being is no longer singular but has become hybrid. Such impressions are more overtly reflected in the cultural imaginary, where depictions of transplantation are shot through with disturbing narratives that communicate an underlying anxiety that the essence of the deceased donor might overwhelm the identity of the recipient, or that they might resurface as a spectral presence. Beyond any changes felt by an embodied self in recovery, there is a distinct sense of a self whose experiences are haunted by irregular traces of an other. For Derrida (1994), the coming of the other is in any case inevitable and it constitutes a hauntological relationship between absence and presence, life and death, as well as self and other. Personal identity, temporal and spatial certainties are all put in question, and those just are the dominant issues that frame the existential register of organ transplantation and the concept of "living on" after deceased donation.

Whatever we think of the experiential persistence of the donor's essence, there is in fact some biological explanation in that the donor's different DNA is never expunged from the recipient's body. Recent research has definitively shown, after much reluctance on the part of the medical establishment,[7] that cellular chimerism occurs not just at the site of the specific transplant but throughout the body (Starzl et al. 1992). What is called microchimerism is a form of hybridity in which the cells of self and other co-exist in a singular body, and in transplantation research it is now recognized that donor cells with their unique DNA circulate throughout the body via the peripheral blood supply. The presence of microchimeric cells is usually very low—except at the site of the transplant organ itself—but those cells can accumulate in other organs constituting a form of macrochimerism. In either case, the donor DNA colonizes the recipient body, while simultaneously the recipient's own DNA infiltrates the donor organ at low levels. In effect, donor and recipient are entwined in a chimerical relationship, although there is ongoing debate as to whether this is pathological or beneficial,

or more likely both according to context. Microchimerism is as yet a little-known aspect of transplantation—medical specialities like other knowledge systems tend to work in isolation where cardiologists may be unaware of the work of immunologists, for example—and it is likely that the majority of laypeople involved have little awareness of its operation. The information still given to recipients if they ask is that donor DNA will stay in situ in whatever organ is transplanted, and just a small number of interview respondents on either side of the transplant mentioned DNA. One bereaved mother was really interested to understand what happens to the two sets of DNA and hoped that the recipients would write to her: "It's his DNA and it's still kicking around somewhere, so yes I'd like to hear from them." Despite the minimal level of relevant knowledge at present, it seems probable that just as public understanding has very swiftly embraced the existence of the human microbiome—although not yet its ontological implications—so too microchimerism may give weight to donor and recipient feelings that at present are dismissed as merely imaginary and even somewhat discreditable.

My position here is not that bioscience is the final arbiter of the truth of embodiment, but that the understanding of intracorporeality that microchimerism insists on may lead to a greater acceptance of the curious relationality of those involved in transplantation.[8] What *is* already clear is that at the cellular level the boundary between self and other—the recipient and donor—is displaced. And if we accept the phenomenological notion that changes to the body instigate changes to the self, then something profound is underway. As the GOLA research found, on the level of *who am I?*, recipients do frequently struggle to negotiate their newly hybrid identities, while in substantive terms, even taking ownership of the transplanted body part—naming it *my heart*—is a point of anxiety. In material terms, the genetically different heart of the deceased donor is never simply assimilated. It is simultaneously the ground of the recipient's survival and the precise focus of an immunological onslaught that, if the process of rejection succeeds, kills both the grafted organ and the host. In survival, the relation is transformative: the rigid boundaries that hold apart self and other, living and dead, and past and present, give way to an intracorporeal and atemporal self. The otherness of the donor organ is both constitutive of the self and remains excessive.

Any organ transplantation must always arouse the absent presence of the other, but it is invariably the heart that is the focus of attention. Most heart donors are the source of multiple transplantable organs and tissues, but no other organ had the resonance, nor the power to disturb the normative teleology of life and death, that respondents attribute to the heart. One bereaved mother expressed something of this disordering of temporality, saying, "You don't expect your children to go before you" and "You give them life and then you make decision to take his life." Yet this deeply painful thought was offset by the possibility of continuity. Asked

what she would say to the recipient, she replied, "Take care of the heart and it will look after you for the rest of your life," adding, "After all. I created that heart…(I hope) he [the recipient] is a good man." Such anxiety, as here, about the heart going to the right kind of person is fairly common, although some proxies felt that the agency of a "kind" heart would prevail. As one generous mother put it, "if a mean bastard got P's heart…his [the recipient's] whole attitude to life would change." If microchimerism is indeed a highly probable consequence of transplantation, then the intuitive feelings of donor proxies and recipients alike — what I am calling a hauntological state—would have a surprising biological endorsement, though by no means full explanation. Once a donor's DNA and its specific immunological codings are embodied by the recipient but remain unassimilated, then self-identity can no longer be certain and the trope of living on in another, beyond any conventional time frame, begins to make material sense.

Putting the medical implications aside, the significance of microchimerism has become an arena of deep fascination for biophilosophy,[9] in large part for the insight it offers into the unstable relationships between past, present, and future, self and other, and life and death (Pradeu 2012; Oele 2017; Shildrick 2015, 2022). Given that the notion of death in particular evokes the uncanny—what is in excess of rationalist thought—then we surely need to rethink its meaning in relation to deceased donors and their recipients. In Western thought, anxiety around dying is ubiquitous both for the imminent termination of the singular self, and paradoxically because the dead have haunted the imaginaries of every age and culture. The belief in an earthly end, albeit unwelcome, is well entrenched; but intimations of the persistence of the dead have the capacity to evoke the negative spectre of parasitism, of one living on at the expense of the other, but they also speak to the symbiosis of assemblage and sustainability. As Deleuze notes, "Death has an extreme and definite relation to me and my body and is grounded in me, but it also has no relation to me at all—it is incorporeal and infinitive, impersonal, grounded only in itself" (1990, 151).

None of the PITH or GOLA interviewees were academic philosophers, but the elderly woman who had readily consented to the redistribution of her husband's organs intuitively echoed—despite her cool rationalism—that Deleuzian insight when she reflected on her husband's death: "It's no longer life, it's potential." The task is to reconceive human life not as a finite essence, actualized in the limited time span of one generation, but rather as temporally and spatially expansive, a dynamic element in the cycle of becoming that comprises all types of living beings, human and otherwise. Although each personal human life *is* organized and transformed by discrete episodes such as birth, pregnancy, and death, in another register, those same modes exceed any singular mode of embodiment and gesture towards intangible and atemporal forces. In rejecting the sovereign subject of modernity, Deleuzian thought offers instead a tangible and processual

state of becoming in which any individuality is provisional and always at the point of unraveling its own boundaries (Deleuze and Guattari 1987).

One way to allaying the pain and anxiety felt by both donor proxies and recipients might be for the authoritative discourse of biomedicine to give up its investment in mastery, chrononormativity, and the techno-utopian promise of restoration to the self. If what lies beyond the wound of the sutured body were openly explored, mortality itself would not be an end point. Such a move entails that first, success should not be measured in terms of a recovered self alone, but as much through the entry into incorporeal co-existence and forms of assemblage; and second, the personal event of dying should be seen as the revitalization of life in other forms. The ontological, epistemological, and ethical challenges demand no less than a new imaginary that may better reflect multifarious modes of life. Welcoming the enmeshment of living and dying does not diminish present suffering or grief, but it opens onto another dimension where a fluctuating sense of absence and presence is no longer disturbing, and where life escapes its temporal constraints to point towards the horizon of a flourishing future.

Notes

[1] The Process of Incorporating a Transplanted Heart (PITH) initiated in 2008 focused on recipients; while from 2011 The Gift of Life: A Critical Visual Exploration of Donor Families' Responses to Organ Donation (GOLA) switched attention to donor proxies (REB # 07-0822-BE).

[2] For biomedical professionals, donation after circulatory death (DCD) heart transplant has many pragmatic benefits including expansion of the donor pool, decreased waitlist times, and increased "total organ yield per donor" (Lee et al. 2022; Truby et al. 2022).

[3] See Burkle et al. (2014) for an analysis centered on the case of Jahi McMath, whose parents refused in 2013 to accept the discontinuation of medical care following a declaration of brain death. In 2018 the child's death was finally agreed by all after a failed operation to treat an intestinal problem.

[4] Post-transplant cohort, PITH project REB File # 07-0822-BE. It is important to note that all participants in the study were regarded as clinically and psychologically stable.

[5] It should be noted that in her own work on that imaginary, Dolleen Tisawii'ashii Manning (2014) is highly critical of what she sees as the Deleuzian appropriation of Indigenous beliefs. She understands the encounter as "a meeting of radically different systems of thought, one of which has attempted to assimilate and eradicate the others, while at the same time appropriating and romanticizing them" (2014, 187). In a different Indigenous context, however, Māori scholar

Rangimarie Mahuika offers a somewhat dissimilar approach: "(K)aupapa Māori does not make claims to universal truth or to superiority over other existing paradigms. Arguably the ultimate goal…like much of the scholarship from indigenous and minority peoples, is to challenge and disrupt the commonly accepted forms of research in order to privilege our own unique approaches and perspectives, our own ways of knowing and being" (2008, 4). While acknowledging that many Deleuzian notions owe much to widely overlooked or suppressed pre-existing systems of thought, it seems productive to draw and reflect on the parallels.

[6] After initially citing Derrida, I invoke Deleuze here because despite their differing ontological approaches, both offer an important reconceptualization of time and presence in particular. Derrida (2001) himself spoke—with some obvious license—in his eulogy for Deleuze of the "near total affinity" between their philosophical outlooks.

[7] See Aryn Martin (2010) for an account of that reluctance in the similar context of maternal-fetal microchimerism.

[8] For fuller account of the implications of microchimerism in the context of transplantation see Shildrick (2022).

[9] Biophilosophy should be distinguished from the more conventional philosophy of biology insofar as it does not engage with biology from a position of external neutrality but instead explores how all life is in a state of dynamic transformation that generates new ways of thinking. Biophilosophy is about the non-hierarchical entanglement of two previously distinct disciplines.

References

Abdeldayem, Hesham., Ahmed, Farag El-Kased., Ahmed, Elshaarawy et al. 2016. "Religious concepts in organ transplantation." In *Frontiers in Transplantology*, edited by Hesham Abdeldayem, Ahmed F. El-Kased and Ahmed El-Shaarawy, 3 -22. London: InTechOpen. http//dx.doi.org/10.5772/62401.

AlHabeeb, Waleed., Fakhr, AlAyoubi., Adel, Tash., Leenah, AlAhmari, and Khalid F. AlHabib. 2017. "Attitude of the Saudi Community Towards Heart Donation, Transplantation, and Artificial Hearts." *Saudi Medical Journal* 38 (7): 742–47. https://doi.org/10.15537/smj.2017.7.18178.

Burkle, Christopher M., Richard R. Sharp, and Eelco F. Wijdicks. 2014. "Why Brain Death Is Considered Death and Why There Should Be No Confusion." *Neurology* 83 (16): 1464–49. https://doi.org/10.1212/WNL.0000000000000883.

Costa-Font, Joan., Rudisill, Caroline, and Maximilian Salcher-Konrad. 2021. "'Relative Consent' or 'Presumed Consent'? Organ Donation Attitudes and Behaviour."

European Journal of Health Economics, no. 22, 5–16. https://doi.org/10.1007/s10198-020-01214-8.

Clarke, Michelle J., Kathleen N. Fenton, and Robert M. Sade. 2016. "Does Declaration of Brain Death Serve the Best Interest of Organ Donors Rather than Merely Facilitating Organ Transplantation?" *Annals of Thoracic Surgery* 101 (6): 2053–58. https://doi.org/10.1016/j.athoracsur.2016.01.100.

Deleuze, Gilles. 1990. *The Logic of Sense*. Translated by Mark Lester with Charles Stivale. London: Athlone Press.

Deleuze, Gilles, and Félix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. Minneapolis: University of Minnesota Press.

Derrida, Jacques. 1973. *Speech and Phenomena.* Evanston: Northwestern University Press.

Derrida, Jacques. 1974. *Of Grammatology*. Translated by Gayatri Spivak. Baltimore, MD: Johns Hopkins University Press.

Derrida, Jacques. 1981 "Positions: Interview with Jean-Louis Houdebine and Guy Scarpetta. In *Positions*, translated by Alan Bass. Chicago: University of Chicago Press.

Derrida, Jacques. 1994. *Spectres of Marx: The State of the Debt, the Work of Mourning and the New International*. Translated by Peggy Kamuf. London: Routledge.

Derrida, Jacques. 2001. "Gilles Deleuze (1925–95): I'm Going to Have to Wander All Alone." In *The Work of Mourning*, edited by Pascale-Anne Brault and Michael Naas, 189–96. Chicago: University of Chicago Press.

Kafer, Alison. 2013. *Feminist, Queer, Crip*. Bloomington: Indiana University Press.

Lee, Candice., Catherine Tsai, Eric Adler, and Victor Pretorius. 2022. "Emerging Frontier in Heart Transplantation: Donation after Circulatory Death." *Journal of American College of Cardiology*. Accessed May 12, 2024. https://www.acc.org/Latest-in-Cardiology/Articles/2022/11/21/13/31/Emerging-Frontier-in-Heart-Transplantation.

Mahuika, Rangimarie. 2008. "Kaupapa Māori Theory Is Critical and Anti-colonial." *MAI Review* 3, art. 4, 1–16. https://www.journal.mai.ac.nz/system/files/maireview/153-877-1-PB.pdf.

Manning, Dolleen Tisawii'ashii. 2014. "The Becoming-Human of Buffalo Bill." In *Intensities and Lines of Flight: Deleuze/Guattari and the Arts*, edited by Antonio Calcagno, Jim Vernon, and Steve G. Lofts, 187–206. London: Rowman and Littlefield.

Martin, Aryn. 2010. "Microchimerism in the Mother(land): Blurring the Borders of Body and Nation." *Body & Society* 16 (3): 23–50. https://doi.org/10.1177/1357034X10373404.

Mauss, Marcel. (1954) 1990. *The Gift: The Form and Reason for Exchange in Archaic Societies*. Foreword by Mary Douglas. London: Routledge.

Oele, Marjolein. 2017. "Openness and Protection: A Philosophical Analysis of the Placenta's Mediatory Role in Co-constituting Emergent Intertwined Identities." *Configurations* 25 (3): 347–71. https://doi.org/10.1353/con.2017.0023.

Oliver, Mike., Ahmed, Aimun, and Alexander Woywodt. 2012. "Donating in good faith or getting into trouble Religion and organ donation revisited." *World Journal of Transplantation* 2 (5): 69–73. https://doi.org/10.5500/wjt.v2.i5.69

Prabhu, Pardeep Kumar. 2019. "Is Presumed Consent an Ethically Acceptable Way of Obtaining Organs for Transplant?" *Journal of Intensive Care Society* 20 (2): 92–97. https://doi.org/10.1177/1751143718777171.

Pradeu, Thomas. 2012. *The Limits of the Self: Immunology and Biological Identity*. Translated by Elizabeth Vitanza. Oxford: Oxford University Press.

President's Council on Bioethics (US) ed., 2011. *Controversies in the Determination of Death: A White Paper of the President's Council on Bioethics*. Government Printing Office.

Rameka, Lesley. 2016. "Whakapapa: A Māori Way of Knowing and Being in the World." In *Encyclopedia of Educational Philosophy and Theory*, edited by Michael A. Peters. Singapore: Springer. https://doi.org/10.1007/978-981-287-532-7_172-1

Shah, Seema K., Kenneth Kasper, and Franklin G. Miller. 2015. "A Narrative Review of the Empirical Evidence on Public Attitudes on Brain Death and Vital Organ Transplantation: The Need for Better Data to Inform Policy." *Journal of Medical Ethics* 41 (4): 291–96. https://jme.bmj.com/content/41/4/291.

Shaw, Rhonda, and Robert Webb. 2021. "Ka Mura Ka Muri: Understandings of Organ Donation and Transplantation in Aotearoa New Zealand." *Medical Humanities* 47 (4): 456–65. https://doi.org/10.1136/medhum-2020-012038.

Shildrick, Margrit. 2015. "Chimerism and Immunitas: The Emergence of a Posthumanist Biophilosophy." In *Resisting Biopolitics: Philosophical, Political and Performative Strategies*, edited by S.E. Wilmer and Audronė Žukauskaite, 95-108. London: Routledge.

Shildrick, Margrit. 2020. "Hauntological Dimensions of Heart Transplantation: The Onto-epistemologies of Deceased Donation." *Medical Humanities* 47 (4): 388–96. https://doi.org/10.1136/medhum-2020-011982.

Shildrick, Margrit. 2022. *Visceral Prostheses: Somatechnics and Posthuman Embodiment*. London: Bloomsbury.

Starzl, T.E., A.J. Demetris, N. Murase, S. Ildstad, C. Ricordi, and M. Trucco. 1992. "Cell Migration, Chimerism, and Graft Acceptance." *Lancet* 339 (8809): 1579–82. https://doi.org/10.1016/0140-6736(92)91840-5.

Taskin, Şenay Karakus. 2017. "Spinal Reflexes in Brain Death Cases." *Transplantation*, no. 101, S132. https://doi.org.10.1097/01.tp.0000525187.43888.5e.

Truby, Lauren K., Casalinova, Sarah., Patel, Chetan B., Richa Agarwal, Christopher L., Holley, Robert T., Mentz, Carmelo Milano et al. 2022. "Donation after Circulatory Death in Heart Transplantation: History, Outcomes, Clinical Challenges, and Opportunities to Expand the Donor Pool." *Journal of Cardiac Failure* 28 (9): 1456–63. https://doi.org/10.1016/j.cardfail.2022.03.353.

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