

*“Any Fraction of Infinity”:
Aging, Illness, and the Right to Continue*

Late in September of last year, I was working in the emergency room sometime after midnight when my first hospice patient arrived. Miss Emelia¹ presented with multiple metastatic carcinomas and an order not to resuscitate. She essentially had no complaints — no new developments, no acute condition that brought her to the hospital — but simply realized she was about to die, and demanded that someone bring her to the hospital until her harried aide finally assented and called an ambulance. The medics arrived in our department shortly later with a perplexed history that mainly reduced to, “84-year-old female, history of such-and-such, is dying and doesn’t want to be; she’s all yours.” All that I remember after that — but at the same time, all that I cannot, and never will *not* remember — is the way she would not stop holding on. She held onto the bed-rails when we tried to move her. She held onto the doctor’s white coattails as she tried to leave the room. She held her aide’s hand — who was supposed to have left for home hours ago — in a death grip. In my role on the medical team it is my habit to stand by the entrance with my cart, trying to be unobtrusive with the consciousness that patients are already being gawked at by attendings, residents, students, and nurses, and I ought not to add another pair of eyes. But to this day I regret that in my habit and pursuit of professionalism I did not, too, offer her a hand to hold onto.

John Hardwig wrote in the provocative 1997 essay *Is There a Duty to Die?* [1] that the elderly, the incompetent, the “burdensome” — plagued by illnesses which are expensive and exhausting both financially and emotionally — have a duty to end their lives sooner than would occur naturally. This is a duty in service of both families and loved ones, whom Hardwig

¹ All names changed for privacy.

suggests bear the brunt of this expense, and the broader healthcare system, caretakers and community. “The lives of our loved ones can be seriously compromised by caring for us,” he notes. “There can be a duty to die before one's illnesses would cause death.... in fact, there may be a fairly common responsibility to end one's life in the absence of any terminal illness at all. Finally, there can be a duty to die when one would prefer to live.” He emphasizes a greater duty borne from progressing age, on account of ‘having less left’:

A duty to die becomes greater as you grow older. As we age, we will be giving up less by giving up our lives, if only because we will sacrifice fewer remaining years of life and a smaller portion of our life plans. (39)

Similarly, Peter Singer, a popular philosopher whose work is generally taken to strongly represent the utilitarian ethos, proposed a resource utilization hierarchy in which the diminishing future years of the elderly (and seriously ill) are the basis for a de-prioritization of their survival. Singer formulated a measure of disease burden, ‘quality-adjusted life-years’, to propose a carefully calculated delegation of healthcare resources in favor of those with greater potential for cumulative time and prosperity [2]. In *Why We Must Ration Healthcare*, Singer explicitly claimed that saving one teenager is morally equivalent to saving fourteen 85-year-olds, arguing:

If a teenager can be expected to live another 70 years, saving her life counts as a gain of 70 life-years, whereas if a person of 85 can be expected to live another 5 years, then saving the 85-year-old will count as a gain of only 5 life-years. (1)

Singer’s moral theory is utilitarianism — the theory which seeks to maximize good in the world or create as much good, worth or pleasure as possible, by quantifying and comparing different possible acts. Hardwig’s argument, though not fully reliant on utilitarianism, also depends on classically utilitarian constructs. According to utilitarianism, one person ought to die if it would save five others [3]; similarly, one has a moral commitment to end one’s life early if doing so would marginally extend the lives of enough others that the sum total of hours saved is

greater than exists in one's own life. And in a more divisive but still popular case, if one person could endure 50 years of horrible and unrelenting torture to save a quadrillion of people from getting a speck of dust in their eye, that person ought to be tortured [4, 5]. These exaggerated cases bear a close relationship to cases of the elderly and ill; Hardwig argues that if an individual's continued life causes hardship and suffering in others', there is very likely a duty for that individual to end their life. It does not matter that death for the individual may be orders of magnitude worse than the sufferings that others face as a result of their living; as long as there are enough others facing small hardships, or others facing enough small hardships, then their cumulative hardships would outweigh those faced by the individual by ending their life.

My patient Emelia was eighty-something years old, and her body was riddled with cancer, and she was in protracted pain. Her care was costly to all involved. She not only met many of Hardwig's criteria for a duty to die, but even by conventional healthcare standards was the type of patient relegated to hospice facilities instead of inpatient units. She was the type of patient who wouldn't get approved for a risky cardiac surgery, or wouldn't be eligible to receive a new organ if hers fails, because as a society and medical institution we all seem to agree that she has used up the bit of time we're all allowed; that to take more — to take an organ from another, younger, healthier patient — would be not only medical ill-advised but also, in a way, greedy. Hardwig claims, "a duty to die is more likely when you have already lived a full and rich life. You have already had a full share of the good things life offers." (39) In an overwhelmed system, patients like Emelia aren't *supposed* to come back to the emergency department; they are supposed to stay in hospice as the end approaches and not cause any trouble. In Hardwig's conception, it is patients like Emelia who ought to take their exit before they present unreasonable burdens.

And yet, *she wasn't ready*. There is a cultural trend to depend — as children, mentees, observers and caretakers of the aging and eventually as the aging ourselves — on the assurance that acceptance of death will come naturally with time; that eventually, the scourges of physical or emotional pain, injury piling up on injury, and the slipping-away of body, mind, or soul will provoke us to a gradual and increasing friendship with the idea of our death. The vision of Hardwig and sympathizers is that of the aging as choosing a ‘graceful exit’, relinquishing the joy and the bonds of life to the younger who may continue unfettered by them. “To have reached the age of, say, seventy-five or eight years without being ready to die is itself a moral failing,” Hardwig wrote (39). But while the image of an unresisting relinquishment of life is true for some — and too true, too soon, for some others — encountering the dying face-to-face strips away any illusion that acceptance characterizes every experience of dying.

I had the sense, as others present seemed to as well, that time was operating differently in Emelia’s room than in the rest of the emergency department. Emergency medicine typically operates at a rapid pace — on busy nights, the best case scenario for patients who have waited too long and physicians who have too many patients and a department with limited space is to diagnose, treat, and discharge patients rapidly. But this time, Emelia’s physician took extra time to speak with the paramedics, her aide, her facility, and with inpatient units who may be able to admit her. Her aide whose shift ended hours ago was not leaving her side, and all of us even peripherally involved with her case lingered a few minutes longer each time we passed by. Emelia wasn’t ready to move onto the next step either metaphorically or literally; even when a bed was prepared for her in an inpatient unit, she wasn’t ready to leave the emergency room. And so she stayed, still holding onto everyone’s hand that she could access — past the time when she had been fully medically evaluated, and past the time when shifts end, and past the

time when patients leave the emergency room. I remember wondering what a minute could have meant to her that it was worth so tremendously more.

Hardwig and Singer use the limited remainder of time in the ill and elderly's lives as justification for its diminished worth [1, 3]. But even speaking from a purely economic standpoint, as utilitarians are prone to do, doesn't an item increase in value the rarer it becomes? We count seconds, in our youth and health, as a number rising from zero at our birth, a number growing incrementally but astronomically into a figure in the hundreds of millions or the billions. And why *would* we count backwards from the end instead? When we are counting on another thirty, forty, fifty years, our number of seconds remaining is great enough to reassure rather than alarm. But a prognosis is explicitly a figure of time remaining; for Emelia, the billions of seconds past is irrelevant to the shrinking number in her future. Who would dare to tell this woman that in these final hours, each of her seconds carries the same worth that it did in her early youth, when they were as plentiful as humans on the earth? And who would dare to say that a minute, on some Wednesday afternoon for you or I, is worth an even comparable amount to a minute of Emelia's time on that final night?

There is a temptation, which Hardwig and Singer reflect, to regard a period of x hours late in life as equal in duration, and in duration-linked value, to an x -hour period earlier in life. This leads to the conclusions that some large multiple of x is worth far more than x itself — hence, the allocation of resources to the younger and healthier — and that a few extra months are non-consequential in the long span of a life, and surely not worth the imposition of burdens on others — hence, the duty to die. Both claims note an explicit reliance on the notion that the elderly have less time left — and therefore, a lower multiple of x and a survival 'worth less'; the small time that could be gained by survival is not enough to outweigh the burdens it would produce. Considering these claims produces a cognitive dissonance in conjunction with the lived

experience of individuals with Emelia. With less time remaining, Emelia didn't start to let go, but rather she held on more firmly to the remaining hours.

The value of time is not something that can be mathematically proved; no matter how meticulously we propose a mapping of qualia to quantitative value, there will always be a leap of faith needed to assert that the value we chose faithfully represents those qualia. Singer, as an advocate for physician-assisted suicide [6], would presumably concur that experiences of protracted pain or suffering of many sorts could disturb the usual mapping of 'a moment lived' onto 'such-and-such value'; in some cases, surely an individual's estimation of a moment's value is radically compromised by the unique subjective experiences which define that moment. If the mapping from experience to value is influenced by subjective factors for some, and we all surely experience subjective factors by virtue of being individuals, then isn't the mapping influenced by subjective factors for all?

In Emelia's case, the worth of a second leapt in value increasingly the fewer remained; it wasn't entirely clear to any of us why she did insist on coming to the emergency room that night, knowing there was no more medically to be done, but by the way that she held onto hands, sought eye contact, and spoke as much as she was able, it was clear that she sought contact. Beyond not wanting to be alone, Emelia seemed to want to fill every minute with as much new experience, meetings, and communications as possible; in a hospice facility her social world was likely small and contained, but suddenly she was feasting on the whole chaos and pandemonium of a crowded emergency room in the late night. Insofar as externalities may detract from the value of a moment — which utilitarians and those who concerned about 'burdens' must surely concur — can't externalities also multiply the value of a moment?

There is a Jewish saying that because a human life has infinite value, "any part of life — even if only an hour or a second — is of precisely the same worth as seventy years of it, just as

any fraction of infinity, being indivisible, remains infinite” [7]. Life is, as the existentialists will tell you, relatively self-contained despite our social character; the reason why solipsism has been entertained as a valid possibility is that it is surprisingly difficult to prove that anything besides our mind exists, when everything perceptible to us is perceived through its contact with our mind. Perhaps the notion that life has an infinite value reflects the all-encompassing status of the individual mind, whose cessation is not only the cessation of the individual, but of the whole world which that individual perceived. I think Miss Emelia was acutely aware that in leaving, she was leaving behind not only a self but a world; as such, she was holding on not only to her life but to all that surrounded her. By reaching out to *us*, she was reaching out to life; her drives to encounter, to coincide, and to continue were all one and the same.

In the background of any discussion of a duty to die, the reliance on ‘worth of time’ arises again and again. As a moral theory that trades in a currency of ‘units of good’ and ‘units of harm’ in order to make quantitative comparisons of qualitative items like suffering, pleasure, and worth, utilitarianism and its correlates have an unignorable dependency on *uniformity* of time — as is particularly well-revealed by the case of ‘torture versus specks of dust in eye’, which relies on the notion that one second summed up across a quadrillion people is equivalent to 50 years of a single person’s time. One second for me must be one second for you, which must be equivalent to the sum of one-half-second for me and one-half-second for you. One second from October must equal one second from November; one second from the morning is the same amount of time as one second from the evening. Any unit of suffering is necessarily also a unit of time: insofar as we believe that ten years of torture is worse than one second of torture (and utilitarians necessarily do), it would be nonsensical to compare *any* two sufferings if each suffering is not each rooted on an axis of time. While quantification of experience relies on a quantification of time, it is especially critical to utilitarian accounts: we all presumably agree that a gunshot

wound is *ceteris paribus* significantly worse than a paper-cut, but according to utilitarianism, if the gunshot wound is only painful for ten minutes and the pain of the paper-cut persists for ten years, the paper-cut is in fact worse — carrying far more ‘harm units’ — than the gunshot wound. Thus, the utilitarian calculus locates fewer cumulative benefits and fewer ‘harm units averted’ in the shorter lifespans of the elderly and the critically ill — leading to their de-prioritization and even de-valuation in favor of those who are younger, healthier, and carry a greater promise of continuance and recovery.

But is it really true that second for you is a second for me, or that October’s is November’s? While the ticks on a clock, Newtonian time, may be relatively immutable, time as we perceive it — a knitting-together of moments rather than a collection of discrete ticks — is far more subjective. The experience of time is composed of three parts — ‘time-estimation’, our precision in estimating the number of ticks on a clock that have passed, but also ‘time awareness’ or the subjective slowness or fastness of time’s passage, and ‘time perspective’ or our sense of self on a continuum from past, to present, to future [8]. An elderly individual’s ‘clock-time’ presumably operates the same as a young person’s, inspiring direct comparisons such as Singer’s claim that saving one person’s 70 years is equivalent to saving 14 separate people’s five years. But what about the tri-fold *experience* of time?

As for time-estimation and time-awareness, there is at least mild support for the empirical phenomenon of time ‘speeding up’ with age — for example, individuals sense the passage of time over the past decade as more rapid as they increase in age [8]. Some physicists have attributed physiological explanations to the speeding-up of perceive time with age [10]. Though we represent the passage of time with ticks on a clock or summations of numbers, time as it is perceived by the mind is essentially a sequence of stimuli detected by the sense organs; the rate of our perception of these stimuli is what determines our sense of the fastness or slowness of

time passing. According to this theory, the physiological changes of age are associated with a decreased rate of stimuli detection. Experienced time also depends on sensing the continuum of past, present, and future. When one only has five years left, doesn't the conception of a future fall apart? In his memoir *When Breath Becomes Air*, physician-writer Paul Kalanithi wrote how time lost its pacing and continuum as he approached what he knew medically and viscerally to be the end; his whole life and especially his career had been oriented towards the future, and he does not know what time is supposed to mean when the future does not exist [9].

While philosophers have long argued that utilitarians are wrong about the fundamental premise of defining a life's value in terms of the goods and harms it creates, I suggest that utilitarians are mistaken in operationalizing time as the ticks on a clock rather than as the experience contingent on estimation, speed perception, and continuity. I also argue that value interacts with time differently as time becomes limited. To claim that the final hours, or days, or even years of an elderly or ill individual's life are worth the same as the hours in a young and healthy life — or that these hours are less valuable because they come on the tails of a long life lived — is to deny the ambiguous, subjective, and tensile nature of perceived and especially of limited time. It would be tremendously difficult to confront death in the way that Emelia did and maintain that the value of an individual's fleeting hours is reducible to the sum of a dozen others' Wednesday afternoons. And as individuals all in a way trapped in the bone of an embodied mind, is it even possible to equate any time passed by an individual to the sum of times passed by others? I am not arguing for a certain answer, so much as for the asking of the question. The short encounter of that night convinced me of the radically different weight a moment can have in one body or another, but the mystery of what a moment was to Emelia remains mysterious.

There may be a temptation to dismiss the discussion about time's changing value near the end as localized to the unique nature of final days and hours, rather than to the final months and

years of chronic maladies that Hardwig discusses. But if time speeds up continuously with increasing age, in a continuous manner beginning in childhood and extending through the very late years, then why would changes in the speed, nature, and value of time-units be localized to only those last few hours instead of to the whole period throughout which time is substantively changing? More specifically, the cases that Hardwig discusses — of aging and illness — are cases in which the end is perennially a consideration. Whether one's prognosis by illness or time is years out or only days, one is still acutely aware of the finitude of hours in a way that precipitates the acute value of final hours, distinguished from the chronic tread of earlier years. Emelia's desperation took on a special urgency in those last days and hours, but as an elderly woman with long-term cancer, it surely was not her first confrontation with death. The ways that our relationship with time changes in the final hours recollects changes from the entire process of aging and illness.

In the words of Wittmann and Lehnhoff, the experience of time relies on a continuum of past, present, and future. Closely linked with questions of how an individual experiences time are questions of how memory and prediction allow us, respectively, to experience time in the past and future — time which ought not to be chronologically available to us. Emmanuel Levinas wrote that when we gaze on 'the face of death' in another, we are facing our own death. "The other man's death calls me into question," he writes [11]. The mortality of another presents "a summons and a demand that concern the *I*, that concern me. As if the invisible death which the face of the other faces were *my* business, as if that death 'had to do with me.'" [12] The summons of another's death foreshadows the summons we will ultimately face in our own death. Death interrupts the continuum of time, as an individual senses their present growing disjoint from a future; but in witness, our own continuum is broken too, as we see simultaneously in the face of another both our mutual present and the dwindling future that prophecies our own. The

continuum of time, rather than a series of measured ticks, is an improvisational conversation between a collective of pasts, presents, and futures that are interminably linked.

I do not know how the nature of time allows for me to be in the present and yet, in this moment, be back in that emergency room with Emelia, her cottony hair and quiet voice still as vivid in my memory as they were at the time. There was a profundity in her fear and resistance — her holding on cold-handed and frail to the last things she will touch, seeking glimpses of the last faces she will see and voices she will hear, wanting to know the very last of a life's knowings; we all were implicated by our presence in her room, and implicated as we were, it would have been impossible to walk away sooner than was required. Hardwig is correct that our time is not only our own — however while he refers to the relational bonds of life, through which we are burdened by another's illness, he fails to account for the relational bonds of death, through which our commitments to others are amplified rather than released. By writing a page of Emelia's story, I hope to provide some shadow of the longevity she longed for, and a tribute to the strength and dignity of a woman who, irrespective of age and prognosis, had the courage to express her unapologetic renunciation of the eventuality of death. Resistance is the smoke signal of love; her holding-on was a testament to an infatuation with life and with human relationality that we all should be so lucky to taste.

Sources:

- [1] Hardwig, John (1997). Is There A Duty To Die? *The Hastings Center Report*, Vol. 27, Issue 2: 4-44. doi:10.2307/3527626
- [2] Singer, Peter (2009). Why We Must Ration Healthcare. *The New York Time Magazine*, 15th July, 2009. Web.
- [3] Singer, Peter (2005). Ethics and Intuitions. *The Journal of Ethics* (2005) 9: 331-352. doi: 10.1007/s10892-005-3508-y
- [4] Yudkowsky, Eliezer (2007). Torture vs. Dust Specks. *Less Wrong*, 30th October, 2007. Web.
- [5] Otsuka, Michael. Saving Lives, Moral Theory, and the Claims of Individuals. *Philosophy & Public Affairs* 34, No. 2: 109. doi: 10.1111/j.1088-4963.2006.00058.x
- [6] Singer, Peter (2005). Decisions About Death. *Free Inquiry Magazine*, August/September 2005.
- [7] Attributed to Lord Jakobovits, former UK Chief Rabbi.
- [8] Wittmann, Marc & Lehnhoff, Sandra (2006). Age Effects in Perception of Time. *Psychological Reports*, January 2006, 97(3): 921-935. doi: 10.2466/PR0.97.7.921-935
- [9] Kalanithi, P. & Verghese, A. (2016). When Breath Becomes Air. *Random House*, 12th January, 2016: 197.
- [10] Bejan, Adrian (2019). Why the Days Seem Shorter as We Get Older. *European Review*, Vol. 27, No. 2: 187-194. doi:10.1017/S1062798718000741
- [11] Levinas, Emmanuel (1984). Ethics as First Philosophy (Hand, S., Trans.). Hand, S. (Ed.) (1989), *The Levinas reader*, Blackwell: 83.
- [12] Levinas, Emmanuel (1986). The Philosophical Determination of the Idea of Pleasure. *Entre Nous*, Columbia University Press, 1998: 186.