Embracing a Finite Lifespan

If the theme for August is creation, why am I talking about death? For one thing, it's been on my mind. I wrote down my philosophy a few weeks ago to help my family understand why I put strict limits on medical intervention when my survival was doubtful. Somehow that leaked out and Janet and Victor asked me to share my ideas with the Fellowship. Sure, a brush with death didn't make me an expert any more than seeing Saturn through a telescope made me an astronomer. But that one glimpse of Saturn forever changed how I think about it.

Even though the topic was accidental, dying *is* part of creation. Nature reminds us there cannot be one without the other. For some species, procreation brings certain and swift destruction. For humans, the consequences are usually deferred and perhaps better viewed as metaphorical. Franz Kafka said, "The meaning of life is death." Knowing we will die imposes urgency and intention on our lives. No one knows what awaits us after death. It may be nothing. All we know for sure is that we are alive now, and only briefly at that.

Humans have an awareness of our own imminent death, which intensifies with age. Nonetheless, we tend to delay any true reckoning, vaguely anticipating that ever-receding date with destiny. We pretend that dying is asymptotic rather than abrupt (meaning we keep getting closer but never quite reach it). Of course, since no one lives much more than a century, the asymptote exists only in our minds.

Making a Friend of Death

Contravening this tendency to ignore or fear death is a higher wisdom that regards it as a natural and necessary part of life. Montaigne wrote how contemplating death can deprive it of its greatest advantage over us. "To practice death is to practice freedom. A man who has learned how to die has unlearned how to be a slave." Unitarian Universalist Philip Simmons, a professor of English and young father wrote *Learning to Fall* while he was dying from Lou Gehrig's disease. He yielded to the reality of death with humility and singular authority. "When we accept our impermanence, letting go of our attachment to things as they are, we open ourselves to grace. When we stand calmly in the face of our passing away, when we sense the nearness of death and feel its rightness equally with birth, then we will have crossed over to that farther shore where death can hold no fear for us, where we will know the measure of the eternal that is ours in this life."

In western cultures, resisting death has always conveyed a certain heroism. We honor those who fight death against overwhelming odds. And, if only in private, we demean those who *choose* to die. The poet Dylan Thomas declared war on death. "Do not go gentle into that good night, Old age should burn and rave at close of day; Rage, rage against the dying of the light." But casting death as the enemy, unworthy of our surrender, can heighten the dread we already feel and devalue the clarity we need to face our ending gracefully.

There is a difference between defiance and denial. Dylan Thomas qualified his rebellion with ultimate acceptance, "wise men at their end know dark is right." He advocated not so much a refusal to die as a refusal to live our last years without purpose and passion. When those qualities are depleted, the old and wise know it is time to go. The Zen master Shunryu Suzuki reconciled this rage of the living with the serenity of the dying. "You should burn yourself completely, with nothing remaining but ashes."

A sense of purpose relies on the perception of something still left to conquer. In *The Old Man and the Sea*, Ernest Hemingway glorified combat even in the context of utter indifference to life or death. Speaking to a giant marlin (his admired foe) the old man commits himself to the fight, not the outcome. He says, "I do not care who kills who." The struggle alone gives him dignity and meaning. He reflects, "A man can be destroyed but not defeated." Indeed, resisting defeat ultimately brings destruction as he admits, "Fishing kills me exactly as it keeps me alive."

The Best Measure of Life

However ephemeral or uncertain life may be, it asks us the haunting question, "how much is enough?" Answering this requires some standard by which to measure our days of mortal existence. We might seek to maximize pleasure, or material success, or power, or the experience of love and beauty. Or we might wish only to minimize pain. While all these can be worthy pursuits, each is a weak substitute for a connection to the larger world that we commonly think of as "meaning." C. S. Lewis distinguished this elusive state of mind both from happiness and pleasure. He said, "I doubt whether anyone who has tasted [it] would ever ... exchange it for all the pleasures in the world."

In *Man's Search for Meaning*, Victor Frankl also observed that success and happiness are incidental to this mysterious connection that supplies meaning. He said they ensue as the "unintended side effect of one's personal dedication to a cause greater than oneself." As a prisoner in a Nazi concentration camp, Frankl even found value in misery. He wrote, "In some ways suffering ceases to be suffering at the moment it finds a meaning." He derived his meaning from an ever-deepening understanding of human nature. The prison was his laboratory, and he found his meaning through the *study* of meaning.

Without a doubt, meaning is subjective and impossible to measure. A surrogate standard used to assign value to life is age. Ezekiel Emanuel chose the age of 75 as the threshold beyond which to refuse further medical treatment intended merely to prolong life. He argued that individuals, families, and society will be better off if nature takes its course promptly after age 75. Emanuel is a medical doctor and chair of the University of Pennsylvania's department of medical ethics and health policy, as well as a chief architect of Obamacare. He believes older Americans live too long in a deteriorating state, citing a study that showed increases in the life expectancy with disease and the expected years unable to function, along with a decrease in the years without disease. Emanuel wrote, "Doubtless, death is a loss. But here is a simple truth that many of us seem to resist: living too long is also a loss." He notes that people validate this

truth when they say they prefer quality of life over quantity. Yet, "when push comes to shove, they choose quantity."

While medical evidence supports age as a general indicator of quality of life, 75 years is rather arbitrary. Emanuel makes no allowance for genetic and environmental differences that can shift that optimum age of death upward or downward. Besides, even the incapacitated may experience intense purpose in life. He properly states that deteriorating health robs us of our creativity and ability to contribute to work, society, and the world. But he overstates his case by claiming, "Even those who do live beyond 75 aren't actually doing anything 'meaningful' with their lives." This ignores the many productive individuals who work, create or volunteer into their 80's and 90's. But it acknowledges, perhaps unwittingly, that age is only a secondary standard by which to value life. The primary standard is *meaning*.

Emanuel wishes to awaken us to deliberately weigh life against death as we age. He argues most compellingly that a slow death "transforms how people experience us, relate to us, and most important, remember us." Human meaning typically includes the expectation that our legacy will outlive us. Living too long can erode this legacy and with it, our sense of meaning. Our world shrinks as we grow older and we may become disconnected from work, society, and even loved ones. Threats to our physical and mental health loom larger and begin to dominate our lives at the expense of personal fulfillment.

While meaning precludes any sort of measurement, it may be possible to measure some common markers. To paraphrase Frankl, "Everyone has her own specific vocation or mission in life; everyone must carry out a concrete assignment that demands fulfillment. Therein she cannot be replaced, nor can her life be repeated." Meaning is predicated on what Abraham Maslow called self-actualization. Our highest purpose involves the realization of our unique potential. We might distill this process to one of personal growth – in character, intellect, or wisdom. The challenge of growth presents itself continually. We grow through novel experience, fresh understanding, and the initiative to act anew. Conceptually at least, these transitory states lend themselves to measurement.

Learning as the Instrument of Growth and Self-Actualization

Personal growth presupposes an ability to learn. The greater our capacity to assimilate and comprehend new information, the greater our potential to grow. Psychologists have established an inverse relationship between age and the capacity to learn new concepts. This even shows up in business research. A recent Gallup study of organizations around the globe found that as tenure increases, the opportunity to learn and grow decreases.

We might attribute the age-dependent decline in learning to three compounding factors. First, the more experience and knowledge we accumulate as we age, the less that remains for us to acquire. By the mere accrual of sensory and cognitive events, the passage of time presents fewer and fewer opportunities for novel experience (as in the common expression, "I've seen it all"). Original thought becomes increasingly improbable with age, and certainly less likely than

when we are young. One need only observe a healthy child to appreciate how curiosity, enchantment with the world, and an appetite for learning generally reach their peak early in life and decline thereafter.

Second, learning demands a tolerance for uncertainty, which decreases with age. Research suggests that learning deficits observed in healthy older adults are driven by a diminished capacity to represent and use uncertainty to guide learning. In general, confirmation bias increases with age, as we become progressively more invested in our world view and more resistant to ambiguity or new ideas. One study found that reduced uncertainty within the older population could explain learning deficiencies even after accounting for age-related differences in working memory and reasoning abilities.

This brings us to the third factor. The human brain loses capacity and function as it ages. Aging affects the brain's cells, vasculature, gross morphology, and cognition. As we age our brains shrink in volume at a rate of 5% per decade after 40 years, possibly accelerating after age 70. The cortex becomes thinner, the myelin sheath surrounding the fibers of our neurons begins to degrade, and our brain receptors don't fire as quickly. This process manifests itself as cognitive impairment and memory decline. While higher levels of education or occupational attainment may moderate the decline, physiology makes it inevitable.

A Simple Model for Lifetime Learning

I will spare you the mathematics, but I have represented the potential for novel experience and learning as a decaying exponential function of age. We accumulate knowledge and understanding over a lifetime, but at a rate that gradually slows as we get older. At the risk of oversimplifying, the theoretical potential for total knowledge acquisition during a full lifetime might be considered fixed for a given individual. Think of your brain plugged into your surroundings like a cell phone battery plugged into a charger. Some batteries may hold more charge than others, but each has its limit.

The governing principle to represent learning is that the rate of knowledge acquisition at any stage of life is directly proportional to the difference between the ultimate knowledge limit and the amount of knowledge acquired up to that point. The difference between what we *could* learn and what we *have* learned provides the motive force for learning. The closer a battery gets to full charge, the more slowly it charges.

So, while total knowledge increases throughout a healthy lifetime, its *rate* of increase decays and approaches zero asymptotically as age advances. Under reasonable assumptions this makes it possible to deduce, for example, that at age 75 a person will potentially have acquired 97% of his or her theoretical maximum knowledge. Living another 25 years (a 33% increase in lifespan) would only increase this knowledge by 2%. At best, my model provides a conceptual framework, not a rigid prescription. But extending life at an advanced age clearly offers diminishing returns.

The learning paradigm reinforces the dynamic nature of self-actualization. Meaning, like music, relies on transitions. The most beautiful chord will soon lose its power over us if played repetitively. Habit and routine inhibit meaning, which cannot be stockpiled earlier in life for later retrieval. It must be continually regenerated. Frankl says we must answer for the meaning of our lives "daily and hourly." Growing old makes this harder.

The model also implies choices that favor learning and growth over happiness. This allows for pain as a potential contributor to meaning. The poet Wordsworth speaks of "soothing thoughts that spring from human suffering." Old age often brings suffering and regret but can at the same time enrich what he calls "the philosophic mind."

The model's emphasis on meaning is subject to both mitigating and aggravating factors. We may experience pleasure and beauty even beyond our capacity to grow, which would tend to lengthen the ideal lifespan. Offsetting this are the increased pain, loneliness, boredom, and confusion that may accompany a life lived too long. Likewise, the love exchanged with family and friends late in life adds to the positive side of the ledger. Yet this can be nullified by the mounting burden the elderly impose on loved ones and society. An important aggravating factor is the potentially severe loss of memory and reasoning capacity.

Conclusion

In the final analysis, the value of a single life can only be measured by that person. The standard of measure, and the optimum longevity it suggests, will vary from one person to the next. Even if we agreed on the standard, we don't always have control over its enforcement. But we do have the faculty to continually re-evaluate our remaining years. That alone might help us count our blessings while coming to terms with death. And the recognition of late-life tradeoffs could lead to better individual decisions and a healthier society. The current crisis of prolonged personal suffering and its drain on our public health care system call us to abandon this mirage of an asymptotic glide into oblivion. We need to make friends with death, or at the very least, look it squarely in the eye and not blink.

I don't wish to leave the impression of death as a grim reality that only raw courage can confront. Despite the struggle and tragedy, death is the grand finale of our life's symphony. The best chance for a graceful death is to make peace with our *life* – not that it was perfect, but that it was purposeful. Not that we followed the script, but that we followed our heart wherever fate led us. David Brooks said embracing the uncertainty of life-or-death brings clarity and "a humility that comes with realizing you're not the glorious plans you made for your life. When the plans are upset, there's a quieter and better you beneath them." For me, it has helped to realize that the stakes gradually diminish as I get older. Each passing day expands my freedom because I have less to lose. One less day to fear suffering or to inflict it on those I love, one less day to face failure, one less day to cling to my trifling achievements, one less day to disguise futility. Delusions of saving the world slowly dissolve into grateful resignation.