The Wreck of Time

By Annie Dillard

Ted Bundy, the serial killer, after his arrest, could not fathom the fuss. What was the big deal? David Von Drehle quotes an exasperated Bundy in Among the Lowest of the Dead: "I mean, there are so many people."

One R. Houwink, of Amsterdam, uncovered this unnerving fact: The human population of earth, arranged tidily, would just fit into Lake Windermere, in England's Lake District.

Recently in the Peruvian Amazon a man asked the writer Alex Shoumatoff, "Isn't it true that the whole population of the United States can be fitted into their cars?"

How are we doing in numbers, we who have been alive for this most recent installment of human life? How many people have lived and died?

"The dead outnumber the living, in a ratio that could be as high as 20 to 1," a demographer, Nathan Keyfitz, wrote in a 1991 letter to the historian Justin Kaplan. "Credible estimates of the number of people who have ever lived on the earth run from 70 billion to 100 billion."
Averaging those figures puts the total persons ever born at about 85 billion. We living people now number 5.8 billion. By these moderate figures, the dead outnumber us about fourteen to one. The dead will always outnumber the living.

Dead Americans, however, if all proceeds, will not outnumber living Americans until the year 2030, because the nation is young. Some of us will be among the dead then. Will we know or care, we who once owned the still bones under the quick ones, we who spin inside the planet with our heels in the air? The living might well seem foolishly self-important to us, if overexcited.
We who are here now make up about 6.8 percent of all people who have appeared to date. This is not a meaningful figure. These times are, one might say, ordinary times, a slice of life like any other. Who can bear to hear this, or who will consider it? Are we not especially significant because our century is - our century and its nuclear bombs, its unique and unprecedented Holocaust, its serial exterminations and refugee populations, our century and its warming, its silicon chips, men on the moon, and spliced genes? No, we are not and it is not.
Since about half of all the dead are babies and children, we will be among the longest-boned dead and among the dead who grew the most teeth - for what those distinctions might be worth among beings notoriously indifferent to appearance and all else.

In Juan Rulfo's novel Pedro Páramo, a dead woman says to her dead son, "Just think about pleasant things, because we're going to be buried for a long time."

II

On April 30, 1991 - on that one day - 138,000 people drowned in Bangladesh. At dinner I mentioned it to my daughter, who was then seven years old, that is was hard to imagine 138,000
people drowning. "No, it's easy," she said. "Lots and lots of dots, in blue water."

The paleontologist Pierre Teilhard de Chardin, now dead, sent a dispatch from a dig. "In the middle of the tamarisk bush you find a red-brick town, partially exposed... More than 3,000 years before our era, people were living there who played with dice like our own, fished with hooks like ours, and wrote in characters we can't yet read."

Who were the people Ted Bundy killed? Who was the statistician who reckoned that everybody would fit into Lake Windermere? The Trojans likely thought well of themselves, one by one; their last settlement died out by 1,100 B.C.E. Who were the people Stalin killed, or any of the 79.2 billion of us now dead, and who are the 5.8 billion of us now alive?

"God speaks succinctly," said the rabbis.

Is it important if you have yet died your death, or I? Your father? Your child? It is only a matter of time, after all. Why do we find it so supremely pertinent, during any moment of any century on earth, which among us is topsides? Why do we concern ourselves over which side of the membrane of topsoil our feet poke?

"A single death is a tragedy, a million is a statistic." Joseph Stalin, that connoisseur, gave words to this disquieting and possibly universal sentiment.

How can an individual count? Do we individuals count only to us other suckers, who love and grieve like elephants, bless their hearts? Of Allah, the Koran says, "Not so much as the weight of an ant in earth or heaven escapes from the Lord." That is touching, that Allah, God, and their ilk care when one ant dismembers another, or note when a sparrow falls, but I strain to see the use of it.

Ten years ago we thought there were two galaxies for each of us alive. Lately, since we loosed the Hubble Space Telescope, we have revised our figures. There are nine galaxies for each of us. Each galaxy harbors an average of 100 billion suns. In our galaxy, the Milky Way, there are sixty-nine suns for each person alive. The Hubble shows, says a report, that the universe "is at least 15 billion years old." Two galaxies, nine galaxies... sixty-nine suns, 100 billion suns -

These astronomers are nickel-and-diming us to death.

III

What were you doing on April 30, 1991, when a series of waves drowned 138,000 people? Where were you when you first heard the astounding, heart-breaking news? Who told you? What, seriatim, were your sensations? Who did you tell? Did you weep? Did your anguish last days or weeks?

All my life I have loved this sight: a standing wave in a boat's wake, shaped like a thorn. I have seen it rise from many oceans, and I saw it rise from the Sea of Galilee. It was a peak about a foot high. The standing wave broke at its peak, and foam slid down its glossy hollow. I watched the foaming wave on the port side. At every instant we were bringing this boat's motor, this
motion, into new water. The stir, as if of life, impelled each patch of water to pinch and inhabit this same crest. Each crest tumbled upon itself and released a slide of white foam. The foam's bubbles popped and dropped into the general sea while they were still sliding down the dark wave. They trailed away always, and always new waters peaked, broke, foamed, and replenished.

What I saw was the constant intersection of two wave systems. Lord Kelvin first described them. Transverse waves rise abaft the stern and stream away perpendicular to the boat's direction of travel. Diverging waves course out in a V shape behind the boat. Where the waves converge, two lines of standing crests persist at an unchanging angle to the direction of the boat's motion. We think of these as the boat's wake. I was studying the highest standing wave, the one nearest the boat. It rose from the trough behind the stern and spilled foam. The curled wave crested over clear water and tumbled down. All its bubbles broke, thousands a second, unendingly. I could watch the present; I could see time and how it works.

On a shore, 8,000 waves break a day. James Trefil, a professor of physics, provides these facts. At any one time, the foam from breaking waves covers between 3 and 4 percent of the earth's surface. This acreage of foam is equal to the entire continent of North America. By coincidence, the U.S. population bears nearly the same relation to the world population: 4.6 percent. The U.S. population, in other words, although it is the third largest population among nations, is as small a portion of the earth's people as breaking waves' white foam is of the sea.

"God rises up out of the sea like a treasure in the waves," wrote Thomas Merton.

We see generations of waves rise from the sea that made them, billions of individuals at a time; we see them dwindle and vanish. If this does not astound you, what will? Or what will move you to pity?

IV

One tenth of the land on earth is tundra. At any time, it is raining on only 5 percent of the planet's surface. Lightning strikes the planet about a hundred times every second. The insects outweigh us. Our chickens outnumber us four to one.

One fifth of us are Muslims. One fifth of us live in China. And every seventh person is a Chinese peasant. Almost one tenth of us live within range of an active volcano. More than 2 percent of us are mentally retarded. We humans drink tea - over a billion cups a day. Among us we speak 10,000 languages.

We are civilized generation number 500 or so, counting from 10,000 years ago, when we settled down. We are Homo sapiens generation number 7,500, counting from 150,000 years ago, when our species presumably arose; and we are human generation number 125,000, counting from the earliest forms of Homo.

Every 110 hours a million more humans arrive on the planet than die into the planet. A hundred million of us are children who live on the streets. Over a hundred million of us live in countries where we hold no citizenship. Twenty-three million of us are refugees. Sixteen million of us live in Cairo. Twelve million fish for a living from small boats. Seven and a half million of
us are Uygurs. One million of us crew on freezer trawlers. Nearly a thousand of us a day commit suicide.

HEAD-SPINNING NUMBERS CAUSE MIND TO GO SLACK, the Hartford Courant says. But our minds must not go slack. How can we think straight if our minds go slack? We agree we want to think straight.

Anyone's close world of family and friends composes a group smaller than almost all sampling errors, a group invisible, at whose loss the world would not blink. Two million children die a year from diarrhea, and 800,000 from measles. Do we blink? Stalin starved 7 million Ukrainians in one year, Pol Pot killed 1 million Cambodians, the flu epidemic of 1918 killed 21 or 22 million people... shall this go on? Or do you suffer, as Teilhard de Chardin did, the sense of being "an atom lost in the universe"? Or do you not suffer from this sense? How about what journalists call "compassion fatigue"? Reality fatigue? At what limit for you do other individuals blur? Vanish? How old are you?

Los Angeles airport has 25,000 parking spaces. This is about one space for every person who died in 1985 in Colombia when a volcano erupted. This is one space for each of the corpses of more than two years' worth of accidental killings from leftover land mines of recent wars. At five to a car, almost all the Inuit in the world could park at LAX. Similarly, if you propped up or stacked four bodies to a car, you could fit into the airport parking lot all the corpses from the firestorm bombing of Tokyo in March 1945, or the corpses of Londoners who died in the plague, or the corpses of Burundians killed in civil war since 1993. But you could not fit America's homeless there, not even at twenty to a car.

Since sand and dirt pile up on everything, why does the world look fresh for each new crowd? As natural and human debris raises the continents, vegetation grows on the piles. It is all a stage - we know this - a temporary stage on top of many layers of stages, but every year a new crop of sand, grass, and tree leaves freshens the set and perfects the illusion that ours is the new and urgent world now. When Keats was in Rome, I read once, he saw pomegranate trees overhead; they bloomed in dirt blown onto the Colosseum's broken walls. How can we doubt our own time, in which each bright instant probes the future? In every arable soil in the world we grow grain over tombs - sure, we know this. But do not the dead generations seem to us dark and still as mummies, and their times always faded like scenes painted on walls at Pompeii?

How can we see ourselves as only a new, temporary cast for a long-running show when a new batch of birds flies around singing and new clouds move? Living things from hyenas to bacteria whisk the dead away like stagehands hustling between scenes. To help a living space last while we live on it, we brush or haul away the blowing sand and hack or burn the greenery. We are mowing the grass at the cutting edge.

In northeast Japan, a seismic sea wave killed 27,000 people on June 15, 1896. Do not fail to distinguish this infamous wave from the April 30, 1991, waves that drowned 138,000
Bangladeshi. You were not tempted to confuse, conflate, forget or ignore those deaths, were you?

On the dry Laetoli plain of northeast Tanzania, Mary Leakey found a trail of hominid footprints. The three barefoot people - likely a short man and woman and child **Australopithecus afarensis** - walked closely together. They walked on moist volcanic tuff and ash. We have a record of those few seconds from a day about 3.6 million years ago - before hominids even chipped stone tools. More ash covered their footprints and hardened. Ash also preserved the pockmarks of the raindrops that fell beside the three who walked; it was a rainy day. We have almost ninety feet of the three's steady footprints intact. We do not know where they were going or why. We do not know why the woman paused and turned left, briefly, before continuing. "A remote ancestor," Leakey said, "experienced a moment of doubt." Possibly they watched the Sadiman volcano erupt, or they took a last look back before they left. We do know we cannot make anything so lasting as these three barefoot ones did.

After archaeologists studied this long strip of record for several years, they buried it again to save it. Along one preserved portion, however, new tree roots are already cracking the footprints, and in another place winds threaten to sand them flat; the preservers did not cover them deeply enough. Now they are burying them again.

Jeremiah, walking toward Jerusalem, saw the smoke from the Temple's blaze. He wept; he saw the blood of the slain. "He put his face close to the ground and saw the footprints of sucklings and infants who were walking into captivity" in Babylon. He kissed the footprints.

Who were these individuals? Who were the three who walked together and left footprints in the rain? Who was that eighteenth-century Ukrainian peasant the Baal Shem Tov, the founder of modern Hassidism, who taught, danced, and dug clay? He was among the generations of children of Babylonian exiles whose footprints on the bare earth Jeremiah kissed. Centuries later the Emperor Hadrian destroyed another such son of exile in Rome, Rabbi Akiba. Russian Christians and European Christians tried, and Hitler tried, to wipe all those survivors of children of exile from the ground of the earth as a man wipes a plate - survivors of exiles whose footprints on the ground I kiss, and whose feet.

Who and of what import were the men whose bones bulk the Great Wall, the 30 million Mao starved, or the 11 million children under five who die each year now? Why, they are the insignificant others, of course; living or dead, they are just some of the plentiful others. And you?

Is it not late? A late time to be living? Are not our current generations the important ones? We have changed the world. Are not our heightened times the important ones, the ones since Hiroshima? Perhaps we are the last generation - there is a comfort. Take the bomb threat away and what are we? We are ordinary beads on a never-ending string. Our time is a routine twist of an improbable yarn.

We have no chance of being here when the sun burns out. There must be something ultimately heroic about our time, something that sets it above all those other times. Hitler, Stalin, Mao, and Pol Pot made strides in obliterating whole peoples, but this has been the human effort all along, and we have only enlarged the means, as have people in every century in history. (That genocides recur does not mean that they are similar. Each instance of human evil and each victim's death possesses its unique history and form. To generalize, as Cynthia Ozick points out, is to "befog" evil's specificity.)
Dire things are happening. Plague? Funny weather? Why are we watching the news, reading the news, keeping up with the news? Only to enforce our fancy - probably a necessary lie - that these are crucial times, and we are in on them. Newly revealed, and I am in the know: crazy people, bunches of them! New diseases, sways in power, floods! Can the news from dynastic Egypt have been any different?

As I write this, I am still alive, but of course I might well have died before you read it. Most of the archaeologists who reburied hominid footprints have likely not yet died their deaths; the paleontologist Teilhard is pushing up daisies.

Chinese soldiers who breathed air posing for 7,000 individual clay portraits - twenty-two centuries ago - must have thought it a wonderful difference that workers buried their only simulacra then so that their sons could bury their flesh a bit later. One wonders what they did in the months or years they gained. One wonders what one is, oneself, up to these days.

VII

Was it wisdom Mao Tse-tung attained when - like Ted Bundy - he awakened to the long view?
"The atom bomb is nothing to be afraid of," Mao told Nehru. "China has many people... The deaths of ten or twenty million people is nothing to be afraid of." A witness said Nehru showed shock. Later, speaking in Moscow, Mao displayed yet more generosity: he boasted that he was willing to lose 300 million people, half of China's population.

Does Mao's reckoning shock me really? If sanctioning the death of strangers could save my daughter's life, would I do it? Probably. How many others' lives would I be willing to sacrifice? Three? Three hundred million?

An English journalist, observing the Sisters of Charity in Calcutta, reasoned: "Either life is always and in all circumstances sacred, or intrinsically of no account; it is inconceivable that it should be in some cases the one, and in some the other."

One small town's soup kitchen, St. Mary's, serves 115 men a night. Why feed 115 individuals? Surely so few people elude most demographics and achieve statistical insignificance. After all, there are 265 million Americans, 15 million people who live in Mexico City, 16 million in greater New York, 26 million in greater Tokyo. Every day 1.5 million people walk through Times Square in New York; every day almost as many people - 1.4 million - board a U.S. passenger plane. And so forth. We who breathe air now will join the already dead layers of us who breathed air once. We arise from dirt and dwindle to dirt, and the might of the universe is arrayed against us.