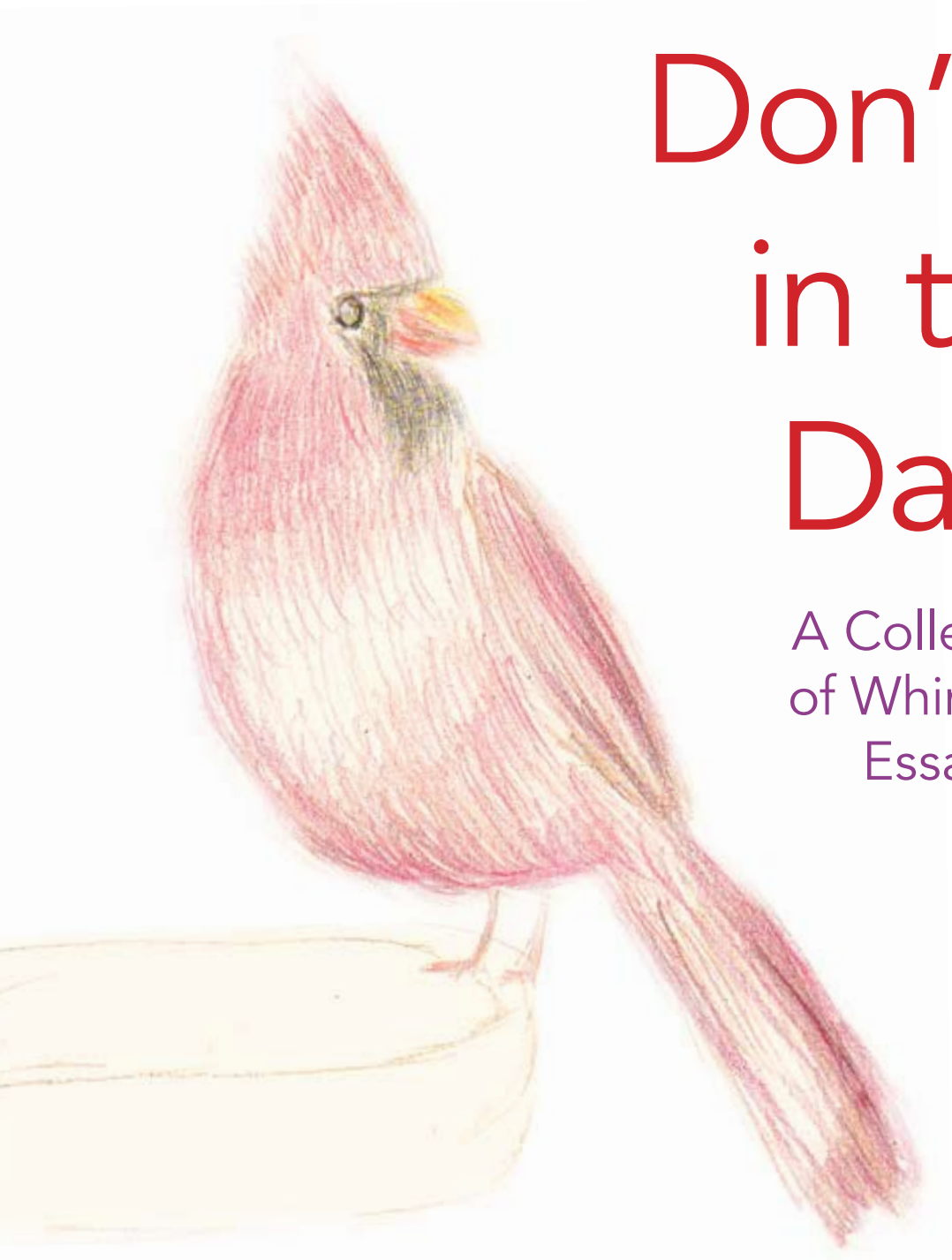
Our Birds Don't Eat in the Dark

A Collection of Whimsical Essays



Kent M. Keith

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By

Kent M. Keith

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To Michel de Montaigne (1533-1592),
the French philosopher who popularized the
essay as a literary genre,

with profound apologies,

and

To Lewis Thomas (1913-1993),
the American physician, poet, etymologist,
administrator, educator,
policy advisor, and researcher whose book,
The Lives of a Cell,
introduced me to the joy of essays,

with profound gratitude.

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Author's Preface

There are a lot of serious issues facing our world, and we need to engage them. But sometimes, we should stop and enjoy all the things in our world that are amusing, strange, cacophonous, random, contradictory, and fascinating. Those things make up part of my daily life, and I am grateful!

To describe that part of my daily life, I thought it would be best to be whimsical. Whimsy is defined as "playfully quaint or fanciful behavior or humor." I think that whimsy is a good way to approach a lot of things that happen in real life.

The idea of writing essays came from Lewis Thomas, whose book, ***The Lives of a Cell***, is a series of wry and informative essays that I thoroughly enjoyed reading for the first time decades ago, and recently enjoyed reading again. Thomas died in 1993, but his essays continue to inspire.

The essay is a literary form that has been used for many purposes, including observations of daily life, recollections, and reflections. It is a very flexible genre, so I set out to flex it. I decided to write about whatever came to mind. I especially wanted to write in a conversational tone, as though you and I are seated in a coffee shop and I am talking to you, and you are too polite to suddenly check the time, announce that you have another appointment, and stand up and leave.

I hope you enjoy reading these essays. I had a really good time writing them.

Kent M. Keith
Honolulu
2021

Our Birds Don't Eat in the Dark

It's a stressful time, a time of uncertainty and change. But in the midst of all the uncertainty and change, there is one thing I know that is absolutely true: our birds don't eat in the dark. It's a solid fact. I can rely on it.

Let me explain. A few months ago, my wife Elizabeth and I set up a birdfeeder in our backyard. We hung the birdfeeder from the branch of a tree behind our house that Elizabeth can see from her home office. Each day, the birdfeeder is visited by a gazillion java sparrows; a dozen large, green, rose-ringed parakeets; an occasional red crested cardinal; and rarely but happily, a deep red northern cardinal. We enjoy watching them.

Our daily ritual is to watch local news on TV at 5:00 pm, and then national news at 5:30 pm. When the national news ends at 6:00 pm, we head downstairs for dinner. That is when I put birdseed in the birdfeeder.

In the summer, birds were waiting to swoop down on the birdfeeder while daylight still reigned at 6:00 pm. As the days shortened, however, it became darker earlier and earlier. By mid-November, the sun was setting at 5:50 pm, so when I filled the bird feeder at 6:00 pm, there were no birds. They had already retired for the night. There were also no birds at 6:25 in the morning when I went downstairs to get my breakfast. The birds did not arrive until the sun rose, which was sometime around 6:40. Then they came with great enthusiasm—first the java sparrows, and then the parakeets.

When the days were longer, I did not notice the effects of sunset and sunrise on the birds. Now, with shorter days, I noticed. And this is what I find so admirable: The birds have standards. They don't eat in the dark.

During the day, the birds flutter and occasionally push each other off the birdfeeder. They compete energetically. But no bird hangs around until after the sun sets and then swoops in to grab all the seeds for himself. No bird gets up early to attack the bird feeder before all the others arrive with the sun. Unlike humans, they compete, but they don't take unfair

advantage. There is something very respectful about their behavior. I like it.

I learned that our birds are diurnal, which means they are active during the day but rest at night. According to some very authoritative-looking websites, birds are very careful about where they sleep, because, well, they want to survive to see another day. They may choose to sleep in cavities or niches, or dense thickets, or tree canopies that give them protection. Properly built bird houses can also be a safe place to spend the night. Some birds sleep together as roost flocks, with the birds at the edge of the flock providing guard service, ready to alert other birds if there are any threats.

Speaking of threats, birds prefer distant early warning systems. Small birds may sleep high up in trees, close to the tree trunk. Yes, the trunk may provide some heat from the day, but the added benefit is that the trunk may vibrate and alert the birds if any predators decide to climb the tree looking for them. Water birds such as herons, flamingos, ducks, and geese have a similar strategy. They usually stay in the water at night. Any hungry predator moving toward them in the water is likely to slosh and make noise. The birds pick up on the sounds and vibrations, hopefully giving them enough time to get away.

Of course, I wonder where ***our*** birds go to spend the night. I don't see them in the trees around our house. Their roosts must be elsewhere. We are the feeding grounds, not the roosting grounds. They have not taken over. They are not squatters claiming our territory. When the sun is up they are everywhere, in our trees and on our cable wires and telephone lines, squawking and chirping. After the sun goes, they go. There is something respectful about that behavior, too. They don't overstay their welcome.

We often say that a person who doesn't eat very much "eats like a bird." It makes sense that our birds don't each much. Our birds are small, and if they ate too much, they would be too heavy for lift-off.

But that gave me another idea. What if we ate when birds eat? What if ***we*** didn't eat in the dark? What if we didn't eat between sunset and sunrise? What if we fasted every day for 12 or 13 hours?

I wanted to know the answer to that crucial question, so I tried it. When the sun went down, I stopped eating. I was pretty excited, because I

figured I could lose a lot of weight doing that. I could imagine the extra pounds magically fading away into the dark night.

By morning, I had made an important discovery.

I am not a bird.

The Chiquita Connection

I like bananas. I have ***always*** liked bananas. I like bananas as a snack, just the way they are, all by themselves. I like them with peanut butter. When I was a kid, I liked them sliced and added to cheerios; today, I like them sliced and added to granola. I like banana cream pie. I mean, I ***really*** like banana cream pie.

When I say I like bananas, I mean Cavendish bananas. You know, the regular, longish, curved, yellow ones with a white interior that you can get from Dole or Chiquita. They are sometimes referred to as "dessert bananas." Which brings me back to banana cream pie. (It doesn't take much to bring me back to banana cream pie.)

Speaking of Chiquita, my wife and I started our married life renting a small cottage in Kalihi. The rental agreement stated: "No Chiquita banana stickers on the refrigerator." We thought it over and decided that we could live with a restriction like that, so we signed the lease. After all, the landlord wasn't against the ***bananas***, he was just against the inappropriate placement of the ***stickers***.

Of course, not all bananas are Cavendish. Bananas vary in size, color, and firmness, and they can be green, yellow, red, purple, or brown when ripe. In some countries, a firmer, starchier variety of the banana is known as a plantain, and it is used mostly in cooking. The banana is said to be botanically a berry, which is probably news to a lot of berries. They don't have seeds— they develop from female flowers without fertilization. They grow in clusters at the top of the banana plant, which makes it easy to find them. China and India are the biggest producers of bananas. Together they account for about 38 percent of worldwide production. (Don't be surprised if your bananas have a sticker that says "Made in China." Chiquita can't do it all.)

Bananas are nutritious, even when they are not found in banana cream pie. According to medical experts, bananas can help lower blood pressure because they are high in potassium. Then there is lectin, a protein that occurs in bananas that can help prevent leukemia. Bananas also offer fiber

and antioxidants like vitamin C. Best of all, from my personal point of view, bananas contain tryptophan, an amino acid which is believed to help preserve memory. (Just in time, just in time!)

Alas, bananas are not good for everyone. Bananas can trigger an allergic reaction in some people. They can also trigger migraines in some people. I am really sorry for those people. They cannot safely eat banana cream pie.

It is estimated that the earliest domestication of bananas occurred in New Guinea between 10,000 and 6,500 year ago. (That's a pretty big ***between***, but it's the best we can do.) Bananas spread from there to Oceania, East Africa, South Asia, and Indochina.

Bananas changed a lot of lives in Africa. John Reader, in his book, *Africa: A Biography of the Continent*, said that bananas and plantains arrived in Africa about 2,000 years ago. They revolutionized food production throughout the equatorial regions and rapidly became a staple food. They had a lot of impact because they produced high yields with minimal labor. It doesn't take much labor to establish and maintain a banana garden that can continue to produce for thirty years. Once bananas proved that they could meet the subsistence needs of families with only minimal labor, the birth rate increased, and the population grew. There were also more people in local communities than were needed to feed the community. That meant that people became free to do other things, like gathering kola nuts, or mining gold, or… well, unfortunately, hunting elephants. (Sorry.)

Bananas changed a lot of lives in Costa Rica, also. And it seems that a distant, probably ***very*** distant, ancestor of mine had a lot to do with it. His name was Minor Cooper Keith, and he lived from 1848 to 1929. He was born in Brooklyn, New York, the same place I was born exactly 100 years later. He developed a multi-national company that grew and sold bananas. His banana interests were eventually absorbed by the United Fruit Company, which later became Chiquita Brands International. That's the company that produces the stickers you can't put on a refrigerator in Kalihi. (Just ***mentioning*** Chiquita at this point should give you chicken skin. Bananas, ancestors, and stickers are starting to come together, here.)

Here's how it happened. In 1871, Minor Keith's uncle entered into a contract with the government of Costa Rica to build a railroad from San

Jose to the port of Limon, located on the Atlantic side of the country. Costa Rica is located in Central America, between the Pacific Ocean on the West and the Caribbean Sea (and then the Atlantic Ocean) on the East. When it comes to shipping, it can go either way. At the time, Costa Rica depended on the export of coffee. The coffee was being transported to the Pacific port of Puntarenas, which was inconvenient, since the market for the coffee was in Europe, on the Caribbean/Atlantic side. The Panama Canal had not yet been built, so a railroad to the Caribbean coast was the best way to solve the problem. Keith joined the railroad project and took it over after his uncle died in 1877.

The construction of the railroad was expensive and tragic. The topography, the jungle, the rain, and the lack of financing were bad enough. Even worse were the diseases— malaria, yellow fever, and dysentery— which were deadly. It is reported that four thousand people, including Keith's three brothers, died during the construction of the first twenty-five miles of track.

To make matters worse, in 1882 the Costa Rican government ran out of money and defaulted on its payments to Keith. Since the government was unable to pay, it did its best to make good by giving Keith 800,000 acres of tax-free land along the railroad route, which was about 5% of the entire country. They also gave him a 99-year lease on the operation of the train route itself. With the land and the rights, Keith was able to raise some money privately, and the railroad was completed in 1890.

But the problems weren't over. It turned out that there just weren't enough passengers or enough cargo to generate enough revenue to pay the interest on Keith's debt. What to do? What to do?

The answer was bananas. Keith grew lots and lots of bananas.

After all, he had 800,000 acres of land, and that land ran alongside the train tracks. Bananas grown on that land were easy to load onto the trains and send to the port of Limon, where they were shipped by steamboat to New Orleans. The banana trade was so profitable that Keith set up a company to market the bananas to foreign ports. He went on to dominate the banana business in Central America and Columbia. His success led to Chiquita, which led to those stickers that we couldn't put on our refrigerator door in Kalihi. (It would have been even better if it had all led directly to banana cream pie, but history is history.)

In the interest of full disclosure, yes, I will eat other fruit. For example, I am fine with apples and pears. But my love for bananas might just be part of the Keith DNA. It might be some sort of deep ancestral thing. There might be something in our double helix that heightens our appreciation for bananas. I have thought about looking into it, but all things considered, I would rather spend my time eating banana cream pie.

Clouds

This is about clouds. Not the computer data cloud that provides IT services from a remote hub, or iCloud, which automatically stores all your photos and documents whether you like it or not. No— this is about those real, misty, fluffy, glorious things up there in the sky.

Clouds are not treated fairly. There are lots of negative expressions based on clouds. For example, we say someone's thinking is cloudy, or the future is cloudy. How can we blame the clouds for fuzzy thinking or uncertainty? Then there are dark clouds, considered a bad omen. But why? Those dark clouds may just be bringing rain, and God knows, we need rain. How else are things supposed to grow? And people say it is a beautiful day when there isn't a cloud in the sky. Is that fair to clouds? Clouds are beautiful. Why is the day supposed to be more beautiful ***without*** them? (I am sensing some anti-cloud bias here, and I don't like it.)

One reason this treatment of clouds is so unfair is that most of us don't even know what a cloud ***is***. Can you describe a cloud? Well, I couldn't either, so I looked it up. Here is what our friends at Wikipedia have to say:

> In meteorology, a cloud is an aerosol consisting of a visible mass of minute liquid droplets, frozen crystals, or other particles suspended in the atmosphere of a planetary body or similar space. Water or various other chemicals may compose the droplets and crystals. On Earth, clouds are formed as a result of saturation of the air when it is cooled to its dew point, or when it gains sufficient moisture (usually in the form of water vapor) from an adjacent source to raise the dew point to the ambient temperature.

Whoa. Did you know that? I didn't. Depending on who jumped into Wikipedia to write the article, it may even be true.

I am impressed with clouds. Nay, I will say more: I am ***grateful*** for these aerosols consisting of liquid droplets, frozen crystals, and other particles. They are wonderful. They enrich my life. I don't want a cloudless sky. I want one ***filled*** with clouds.

When I was in school, we were taught three cloud forms: stratus, cirrus, and cumulus. Stratus clouds are described as long and flat. They occur below 6,000 feet. Cirrus clouds are described as having long, sharp, misty fingers. They occur above 18,000 feet. Cumulus clouds are described as being expansively puffy, like cotton piled on cotton. They occur from near ground level all the way up to 50,000 feet. According to various websites, there are also other cloud forms, like stratocumulus and cumulonimbus. Not to mention the ones that look like rabbits, sailing ships, and Uncle Mervin (but only when he is having a bad day).

We live at the mouth of Manoa Valley in Honolulu. The trade winds blow about 72% of the time, and they blow from Northeast to Southwest. The trades keep the clouds moving. I can sit on my ***lanai*** (which happens to be a balcony) and watch clouds as they gradually move across the sky from left to right, a slow and dignified parade. No matter when I look, the clouds are always different. This is pure entertainment, and it's free (not counting the cost of the house and the ***lanai*** which happens to be a balcony, but otherwise).

Just so you know, "nephology" is the science of clouds, "nephophilia" is the love of clouds, and a person like me who loves clouds is a "nephophile." Now that you know, I don't recommend using these words. I especially wouldn't tell anyone that you are a nephophile. There is no need to alarm people. Just tell people that you love clouds.

That love of clouds includes rain clouds. Yes, rain clouds are foreboding, but they provide worthy information— to wit, that it is about to rain. We see the dark clouds and we head for cover or we try to find an umbrella (we keep buying them but they always seem to disappear— why is that?). Then we hear a "whoosh," which means the rain is very close, and then the rain arrives, rolling down the valley in successive sheets, often causing rainbows while soaking nearly everything.

Clouds are essential to spectacular sunsets because they give the sky depth and texture. The setting sun can bounce its rays off a lot of different clouds, achieving dramatic and varied effects. I have seen clouds spread out across the sky, filled with bright yellows, oranges, reds, blues and purples. I have experienced sunsets in Phuket, Thailand, and Manoa whose brilliant colors rivaled any painting I have ever seen. Such a palette!

My most intimate moments with clouds are, not surprisingly, when I am

up in an airplane. We often fly up through clouds on our way to our cruising altitude, and we usually descend through clouds on our way to landing.

Hundreds of times, I have enjoyed looking out of my small airplane window to see a fluffy field of clouds. To me, it is a magical world, peaceful and quiet, as if this is heaven, and if we look closely enough we will see angels cavorting in the distance. I know that God is everywhere, but it is easier to imagine He is here, in this serene field of fluffy calm whiteness.

It all looks solid, and yet it is a mist. We descend through the mist, temporarily engulfed in wispy clouds, and then Earth appears in all its colors and complexity. The magic is over, but I am grateful to have had those moments of profound peace, looking out of the window from seat 28K in United economy coach. A bit of heaven now, and a hint of heaven to come.

We Are All (Relatively) Related

I have been watching the TV ads for companies that offer to analyze your DNA sample and tell you who you are descended from or what part of the world your ancestors came from. After a careful sofa-based analysis, it seems to me that the various ads give us three different reasons that we should learn about our ancestry. If we do, we will (1) find more meaning in life; (2) attain more security regarding our identity in the cosmos; and (3) discover that we are related to a famous person.

The first message is that we should know our ancestors and their countries because that will add meaning to our lives. These ads show a parent or grandparent sharing ancestry information with a child or grandchild, or the reverse— younger generations connecting with older ones. They also show people discovering that some of their ancestors did really interesting things.

I like this. I agree that it can be meaningful. So did my father. After he retired, he spent hundreds of hours doing serious genealogical research, and he typed hundreds of pages about our ancestors. He included our own family in his documentation as further proof that we exist.

So, what do I know? Well, three of my four grandparents had Scottish last names: Keith, Johnston, and Berry. One never knows who married whom with what last name, but it is possible that sometime in the distant past the ancestors of these three grandparents had something to do with Scotland. I am happy to think so. I like the Keith clan tartan, which makes a very distinguished necktie. I feel uplifted by the very regal Keith coat of arms, complete with a stag head and the clan motto. The clan motto is "Veritas Vincit," which means "truth conquers." I appreciate the optimism. Perhaps we should add the word "eventually." In any case, it is a noble sentiment, and I am quite fond of it.

The Keiths used to have castles in Scotland, and there were twenty-seven Keiths who held the title of Lord Marischal, Earl Marischal, or Great Marischal from 1010 to 1715. Yes— a total of 700 years! A "marischal" was a general, and Scotland had only one of them at a time, so those Keiths

must have felt pretty special.

My fourth grandparent had the last name Marsteller. The Marstellers were German, and seem to have come from the German Palatinate, which is in Southwest Germany. My parents decided to make Marsteller my middle name. It was my grandmother's maiden name, and she was a great lady, so I am honored. I feel like I should go to the German Palatinate some day to find out what a wonderful place I already know that it must be. Until then, all this ancestral information has indeed added meaning to my life.

The second reason given in the ads is that we should know our ancestors because ***we may not be who we think we are***. In one ad, a woman seems to pause while brushing her teeth and says: "We're Polish? I thought we were Hungarian." Then there is the ad with a man dressed in traditional German attire, including classic ***lederhosen***, who discovers that he is Scottish, and has to switch to a kilt. Or the other way around. I can't remember. (Either way, he looks like he would be more comfortable in beach shorts.)

This idea that we may not be who we think we are is such a profound philosophical question that I am not sure it is fair to spring it on us at all, least of all during a TV advertisement that occurs while we are anxiously waiting to see if Leroy Jethro Gibbs and his NCIS team will defuse the bomb in time or become splattered all over the landscape (although subconsciously we know they will survive, because they are going to be on TV again next week—at least ***most*** of them). But I digress.

To come to the point: Are ***any*** of us who we think we are? For that matter, are any of us who ***other people*** think we are? This goes far beyond the question of whether our grandpa and grandma were really law-abiding Greeks. Yes, they lived their last days on the Greek island of Ikaria, but Ikaria is so far from mainland Greece that it is only fair to wonder if they were trying to escape from someone or something, or whether they were actually Italians on their way to Turkey when they got tired and decided to stop at Ikaria and settle down there instead, eventually changing their names and doing their best to blend in. It could have happened. We don't know.

While some people are learning about their ethnic identity, there is no need for any of us to worry about our ***racial*** identity. Our racial identity is

already clear, because we are all the same race. That's a fact. There is only one race, the human race. That's our most fundamental identity. We are all ***homo sapiens***. "Homo" means "man," and "sapiens" means "wise." That label is hard to defend, given the condition of the world today, but there it is. What can you do?

Some scientists and anthropologists call us ***homo sapiens sapiens***, to make sure the reference is to ***modern*** humans, a subset of all humans. It seems to me that the second ***sapiens*** is really a stretch, given the afore-said not-so-great current condition of the world. Humans who are ***doubly*** wise? I don't think so. But we can hope. It is healthy to have some positive, long-term aspirations.

Since we are all one race, it follows logically that we all have common ancestors. It not only follows logically, it also follows Biblically. Think: Adam and Eve. I rest my case.

Some scientists don't follow Biblically, but they are not to be outdone by the Sacred Book. They have their own Eve, known affectionately as "African Eve." Using mitochondrial DNA that is passed from mother to daughter, they claim to have traced all humans today back to one woman who lived in Africa about 200,000 years ago. Other scientists disagree. They admit that ***homo sapiens*** may have emerged from Africa, but they are not ready to accept African Eve as everybody's mother. Stay tuned.

While you are staying tuned, the main point is that we are all one race and we all have common ancestors. It follows that ***we are all related***. (I suggest you stop here, for a few minutes, to let this sink in. Inhale deeply. Exhale slowly. Good.)

This makes it very easy to address the third reason given in the ads, about being related to somebody who is famous. Since we all have common ancestors, it follows that we are ***all*** related to somebody famous. ***Everybody*** is related to ***everybody*** who is famous. Not directly, perhaps, but still related.

Since we are all related to everybody who is famous, we can just decide which famous people we want to claim as our relations. So go ahead. Pick somebody. Seriously. How about Lincoln, or Sun Yat Sen, or Crazy Horse, or Clara Barton, or Harriet Tubman, or Einstein, or Eleanor Roosevelt, or Joan Baez? There is no reason to be shy, here.

Since I am not shy, I am going to pick somebody as my slightly famous relative. Remember the Marstellers who came from the German Palatinate? Yes, ***them***. Well, when I was a boy, we lived in Alexandria, Virginia, and my parents took me to see the grave of Colonel Philip Marsteller.

Philip was born in 1742 in Pennsylvania, the son of German immigrants. He was active during the American Revolution. He helped raise troops, participated in the Continental Congress in 1776, served as a lieutenant colonel in the militia, and was a paymaster and agent who managed the purchase of flour for the French fleet in 1779. After the war, he moved to Alexandria, where he and his son were merchants and auctioneers. He was elected mayor of Alexandria in 1791. Along the way, he became friends with George Washington, and they conducted business together for many years. Marsteller was the only one of Washington's honorary pallbearers who was not a Mason. He died in 1803 and was buried in the yard of Christ Church in Alexandria, which is where we visited his grave.

That's all I know about him. Based on that brief biography, I think of him as a quiet, solid citizen, not flashy but practical. I think of him as a reliable and responsible person who knew how to get things done and was willing to do them. I think of him as the kind of man who wouldn't let you down. Or your coffin, either. So I am happy to choose him as my slightly famous relative.

So there it is: It can be meaningful to know more about your ancestry. I like what I know about my own. And our various heritages and ethnicities should be respected. All these differences can enrich our own lives, as well as the lives of our communities and countries. We are even free to pick whomever we want to be our famous relatives.

Let's just not lose sight of the fact that we are all related. We are one family, all of us on this planet. That means that you, dear reader, are my brother or sister. And while family life can be messy, family members usually love each other. So let's do it. Let's love each other. If we do, it is very likely that we will change the world. Forever.

Sounds

I feel blessed that I can hear. It means that I can enjoy many wonderful sounds. The sound of a baby cooing. The sound of children laughing. The sound of a bird singing in a nearby tree. The sound of a loved one saying "I love you!" And the sound of the fourth movement of Beethoven's 9th Symphony, the finale, a call to universal brotherhood based on the "Ode to Joy" theme. When the chorus holds that high note, the doors of heaven seem to open, just enough so you can peek inside. Ode to Joy, indeed!

Of course, there are also sad sounds. The sound of a lone bugle playing taps. The quiet weeping at a funeral. The sound of a loved one saying good-bye. The sound of a song that brings back unhappy memories. The sound of a wrecking ball taking down an old historic building. The sound of a power saw cutting down ancient trees. The sound of cars crashing together. The sound of sirens.

I don't take sounds for granted. The physical mechanics of hearing are truly miraculous. Here's how I understand it. The outer part of the ear collects sound. The sound pressure is amplified through the middle portion of the ear and passes from air into a liquid medium. Sound waves moving through fluid push filaments that cause hair cells to fire, transforming sound waves into nerve impulses. The nerve impulses travel from the left and right ears through the eighth cranial nerve to both sides of the brain stem and up to the portion of the cerebral cortex dedicated to sound. The brain interprets the sounds; "hearing" becomes meaningful listening.

Air to liquid to filaments to hair cells to nerve impulses to the cranial nerve to the cerebral cortex. That's quite a journey, and I am only giving you a summary. I didn't even mention the tympanic membrane, hammer, anvil, stirrup, cochlea, and a lot more stuff. Even without every detail, it's totally awesome.

Dr. Judi Brownell's book, ***Listening: Attitudes, Principles, and Skills***, is based on the HURIER model, which defines the listening process as involving six components: ***hearing, understanding, responding,***

interpreting, evaluating, and ***remembering.*** She points out that even if the sound waves register on a human ear drum, the sound waves may not be "heard." You have to be paying attention or you won't hear anything. For example, if you are fishing in a nearby stream, you may not "hear" a tree fall because you are focused on catching the fish that has just bitten your line. Brownell says:

> Attention is a selective process that controls our awareness of events in the environment. Every day there are literally hundreds of sounds all around you that you never notice because you aren't paying attention to them… If you don't pay attention to something, it's as if it never existed.

I think we all know this. When your spouse asks you to do something, if you aren't paying attention, you really don't hear. It's as though your spouse's request never existed. (Okay, okay, you're right— it's not an ***excuse***, it's just an ***explanation***.)

I am sensitive to sounds, so I notice a lot of them. My wife and I live on the side of a hill in a mostly quiet neighborhood. Perhaps because the neighborhood is usually quiet, when there are sounds, they travel far. In fact, they seem to drift right up to our house, even when the noise source is hundreds of yards away. My neighbor is stapling shingles to his roof, and the ***snack!*** sound of the stapler travels to my ear, where it moves from air to liquid to filaments to hair cells to nerve impulses to the cranial nerve to my cerebral cortex, and I think: Oh, my neighbor is stapling shingles to his roof.

On a typical day, we get to hear someone enthusiastically wielding a power saw, or a car going by with very loud music (why is it never Beethoven's 9th?), or the sirens of police cars or fire trucks heading into the valley, or the noise in the middle of the night generated by the proud owner of a muffler-less car showing off his or her lack of a muffler. I understand. It's all part of daily life. But there is one sound that drives me crazy.

The sound of a leaf blower.

I can take the steady humming sound of a lawn mower. I am even okay with weed whackers so long as they maintain a steady if somewhat higher hum. The problem with leaf blowers is that they go louder and softer, their pitch goes up and down, and they start and stop, in order to be as irritat-

ing as possible. Hmmmm. HMMMMMM! Hmmm. Hm. HMMMMMMM! Hm-hm-hm. Louder and softer, up and down, long and short.

Actually, I should not say "louder and softer," because even when it is softer, the sound of a leaf blower is so loud that it knocks out all other sounds. If there is a leaf blower anywhere in our neighborhood, it is hard for us to hear each other talk, whether in person or on Zoom. It takes over the entire environment. It dominates. It does not care that we might prefer to be hearing more pleasant sounds. No other sounds count. No other sounds can be heard. If a tree falls in a forest and a leaf blower is going, can anybody hear the tree fall? No, of course not.

What is a leaf blower? Oddly enough, it is known as a gardening tool. It shoots air out of a nozzle in order to move leaves and grass cuttings. It just blows them from one place to another. Leaf blowers are powered by electric or gasoline motors. They can be handheld or mounted on one's back like a backpack.

The origin of these machines seems to have been the invention of fogger machines in Japan back in 1947. They were followed by misting machines in 1955, and leaf blowers in 1977. By 1989, more than a million leaf blowers had been sold in the United States. (Most of them in my neighborhood.)

It was noticed right away that gasoline-powered leaf blowers were a source of both air pollution and noise pollution. The pollutants from the exhaust gas have been linked to cancer, heart disease, and asthma. Leaf blowers also generate dust clouds that potentially contain substances like pesticides, mold, and animal fecal matter that can cause irritation, allergies, and disease. As for noise, leaf blowers can emit noise at levels above those that can cause hearing loss for the operator as well as people who happen to be nearby.

It should not be a surprise that leaf blowers were banned in a few cities after they were first introduced. The manufacturers responded, eventually shifting to battery-powered blowers with no emissions, and models that generate less noise than earlier ones. They still generate ***a lot*** of noise, however, and the problem with dust has not gone away.

So I ask, why? Why are there leaf blowers? Is it all that difficult to use a rake? Did the universe run out of brooms?

When I was growing up, we used rakes and brooms. We raked leaves, and we swept up the dust with brooms. Rakes and brooms are effective, quiet, and inexpensive. A rake may make a scratching noise if it is used on pavement, but it is still very quiet. You'd have to get down on your hands and knees and listen closely to hear anything at all. And I have never heard a noisy broom. It's just not who they are.

You can get a specially designed leaf rake for $15, and a professional one for $40. A broom and dustpan combo can cost anywhere from $10 to $25, depending on what style you prefer. A leaf blower can run from $60 to $300, depending on how much you want it to blow, for how long, and how many people you want to disturb.

Here's an important point: Leaf blowers don't pick up the leaves. Leaf blowers just blow the leaves from one place to another. Sometimes, they blow the leaves from a driveway into a street, or from one yard into another yard, or from public parking stalls into a public park. Leaf blowers are an easy way to make the leaves somebody else's problem. (Here— I am giving you my leaves. No charge.)

When I was a boy, we ***picked up the leaves***. We felt responsible. These were our personal leaves. When we lived in New England, raking the leaves was a fall tradition. The leaves were yellow, red, and brown, and we stacked them into a nice, beautiful pile. Leaf blowers can't do that— they can't create a pile of leaves. Only rakes can do that. Our piles of leaves ended up in the trash, or better yet, they were recycled as mulch or compost. As I said, we were ***responsible***.

One thing you can do with a pile of leaves is this: you can jump into the pile. So as kids, we made piles of these beautiful multi-colored leaves, and then we jumped into them, laughing and screaming and having more fun with leaves than should be legal in any jurisdiction. I remember it, even decades later. I remember the sound.

It was a ***happy*** sound.

The Nose Has It

It is probably not a good idea to start an essay on a down note, but here goes: We humans have a lousy sense of smell. There it is. I said it. We are not the best smellers in the animal kingdom. Not by far.

Edward O. Wilson is a noted American biologist and naturalist. In his book, ***The Meaning of Human Existence*** (which is mostly about human existence and not much about meaning), he points out that we humans rely on sight and sound instead of smell and taste. Here are his harsh words for us:

> … we are chemosensory idiots. By comparison most other organisms are geniuses. More than 99 percent of the species of animals, plants, fungi, and microbes rely exclusively or almost exclusively on a selection of chemicals (pheromones) to communicate with members of the same species. They also distinguish other chemicals (allomones) to recognize different species of potential prey, predators, and symbiotic partners.

This is about "pheromonal communication," which is known by many of us non-scientists as "smelling."

Wilson explains how odor molecules drift out from a gland in the body of an animal, with enough of those molecules in the center of the plume so that it can be detected by other organisms of the same species. He gives the example of a female moth summoning males of her species. The nearest male may be a kilometer away (which to Americans is six-tenths of a mile or 3,168 feet, which is also 1,056 yards, which only becomes comprehensible when we learn that it is the length of ten football fields). The male moth can be stirred to action by as few as 1.3 million molecules per cubic meter. Since we are talking ***molecules***, that is a tiny amount of smellable stuff.

The challenge is to attract the right kind of male of the right species, and not a moth-eating predator. "So precise are some sex attractants of moths that those of closely related species differ only by a single atom," says Wilson. That is about as precise as it can get. According to Wilson,

this kind of "olfactory power" is common throughout the living world.

Our dogs take olfactory power very seriously. One is a black miniature pinscher or "minpin," and the other is a maltese-poodle combo or "malti-poo." They are both little yappy dogs, and of course they run the place. While they are running the place, they are very focused on smelling the place. ***Every*** place. We say that we walk our dogs every morning, but for them it is not about walking, it is about sniffing. The first ten minutes of every walk is a total ***snifferama***. All that our dogs want to do is sniff. They move in a trance from one sniffpoint to the next sniffpoint. I assume they are taking in all sorts of odors that I cannot smell, and as a result, they are learning a whole lot that I will never know.

I find it very humbling to discover that I am inferior to my own pets. I have never gone for therapy, but this could trigger it.

Alas, I am not only worse than my dogs. When it comes to smelling, I am also worse than most humans. I live in fear that my wife will ask me if I recognize her perfume. She asks me because I bought it for her. I bought it for her because I know that she likes it, not because I can tell it apart from other perfumes. I am in the olfactory dark.

I am not much better when it comes to a related topic: wine. Wine is an interesting case because it involves both a sense of smell and a sense of taste, those two things humans are not so good at. The fact is that I cannot smell or taste the difference between a $15 bottle of wine and a $125 bottle of wine. That inability has saved me a lot of money.

My wife is far better than me (in general, but in this case I refer to her ability to smell). It is possible that she is not a "chemosensory idiot" but rather a "chemosensory savant." I suspect this because of something that happened during a visit to Bordeaux, a popular wine-growing region of France. While we were there, we signed up for a tour of the vineyards of Saint-Emilion. There were six of us on the tour, riding to Saint-Emilion and back in a van with our guide.

In the van on the way back to Bordeaux, our guide entertained us by opening up a small box with tiny vials that contained little bits of liquid with different aromas. She passed the little vials around the van, and we each sniffed and guessed before our guide revealed what it was. For example, we detected cherry, strawberry, cinnamon, and apple.

Then came a vial that none of us could identify. That is, except Elizabeth. She announced that it was bell pepper. How does anybody smell bell pepper? But she did. I was stunned. When I asked her, Elizabeth said she could smell it because she had a cold and her nose was stopped up. That would explain her ability to speak French, not her ability to smell bell pepper. We were all amazed.

Those boxes of little vials with various scents are used to train professional wine tasters and wine stewards, also known as ***sommeliers***. Some people become really good at smell and taste, in spite of being human beings.

I should note there is some disagreement as to the relative importance of the smelling and the tasting. For example, it is reported that Kevin Zraly, founder of New York City's Windows on the World Wine School, said that a tongue can detect only four main tastes, while a nose can identify more than 2,000 different odors. He said that anyone can tell whether a wine is good or bad based on its ***smell***. That's why restaurant customers are offered the opportunity to swirl and sniff a sample of the wine in a glass before accepting a bottle of wine. According to Zraly, it's all in the nose! Even more controversially, Zraly claims that because it is all in the nose, "the first taste of a wine is always a shock to your tastebuds."

But enough controversy. Let's get back to those people who are better at smelling and tasting than most humans. One indication of their chemosensory talents is found in the labels on wine bottles and the descriptions of wines found on vineyard websites.

My wife and I are not gourmet wine connoisseurs, but we have been to a few vineyards in Napa Valley, and we like Merlot. The merlot grape is dark blue. The name ***merlot*** is thought to have come from ***merle***, which is the French name for blackbird. Merlot is used as a blending grape as well as a varietal wine in its own right. It is the most widely planted grape in the Bordeaux wine region.

So far, so good. But wait. Take a look at just three descriptions of Merlot wines at three of the Napa Valley wineries that we have visited:

Sterling Vintner's Collection, California Merlot 2018: "Sip our Merlot and savor the cherry-berry and black fruit aromas with notes of juicy plums and oak spices."

Regusci Merlot Napa Valley 2018: "Our 2018 Merlot features aromas of clove, sandalwood, and black peppercorn. On the palate, flavors of blackberry bramble and rhubarb intermingle with soft tannins with lingering berry and spice on the finish."

Mondavi 2017 Merlot Napa Valley: "Welcoming aromas of Bing cherry, blackberry, and raspberry are layered with vanilla, fresh nutmeg, licorice, and warm, toasty, just-out-of-the-oven pie crust notes."

So what does a Merlot taste like? After reading these three descriptions, we have no idea. Maybe the descriptions are different because each Merlot is a blend, and each vineyard blended their merlot grapes with a different set of ***other*** grapes. Perhaps it would also help if we knew what it meant to have "notes," or to "intermingle" and "linger" or to be "layered."

While being confused about all this, we should not miss the really important chemosensory point. Based on the descriptions of these wines, it seems that wine tasters are confident that (1) a single wine can have four to seven distinctive aromas and (2) a human being can taste ***all of them*** in a single sip.

I understand that there are many stages of wine tasting, from the pre-sniff visual inspection, to the first sniff, to the first taste, to the middle taste, to the after taste, to the afterglow. Still, it is impressive to think that anyone can taste between four and seven distinct aromas in a single sip. It gives me pride in us humans. Some of us— to wit, professional wine tasters— are super-human! They are chemosensory heroes, not chemosensory idiots. Hooray!

Either that, or the people who write those wine descriptions should be given an award for their creative writing. How should we describe the award? I don't know. Maybe we should call it an award for writing with a note of fantasy intermingled with lingering illusions layered with the aroma of marketing.

Why Do Roosters Crow?

Why do roosters crow? I ask this on behalf of all the young people who have already asked: Why is there air? Why is the sky blue? Why are there rainbows? Why don't the people who are living at the South Pole fall off the Earth?

Actually, as you surmised, I am asking on behalf of myself. I bring this up because I am seeing chickens almost every day. We walk our dogs in public parks, and the public parks we walk in have lots of free-range chickens and roosters. We see whole families, some with tiny chicks, others with teenage chicks, all moving together in a truly adorable fashion. So cute! Our dogs seem very interested in taking a bite out of them, probably because our dogs know that free-range chickens are better for them. (No hormones except the natural ones.) The roosters have all of the colors— red, white, black, and yellow feathers— and some of them are really handsome for a chicken. And yes, they crow. And crow again.

We keep our dogs on leashes, but they can suddenly surge forward toward the nearest bird. Our miniature pinscher, Chibi, decided to get a closer look at a chicken family one day, and the hen came at him with a vengeance, squawking and flapping her wings. She was ferocious; she was defending her brood. Chibi got away with his life. So far as we can tell, he did not learn anything at all from that encounter. He still lurches forward at the chickens.

When it comes to the rooster crowing question, I am specifically interested in why roosters crow in the morning while it is still dark. They wake me up before I am in the mood to wake up. Who gave roosters permission to do that? I mean, ***really***. Who do these roosters think they are?

The simple fact is that there are many answers to the rooster-crowing question. The internet is abuzz (nay, ***acluck***) with theories, opinions, and even some evidence. You, dear reader, were probably unaware that all this passionate rooster-centric communication was going on. I didn't know, either. I am happy to report that I have discovered a significant sub-culture of chicken farmers, scientists, and hobbyists who are unselfishly willing to share what they know about crowing. As a public service, I will now

provide some of the reasons they give for the crowing of roosters.

First, roosters have an internal clock that helps them anticipate daybreak. However, notice the words "anticipate daybreak." This means that their internal clock is set to go off ***before*** dawn. In my opinion, that's not a good clock, because it goes off while I am still sleeping.

There has been a little research on this. Tsuyoshi Shinmura and Takashi Yoshimura from Nagoya University published a paper in 2013 that revealed that roosters have a circadian rhythm of 23.8 hours that triggers them to crow at specific times. The specific times seem to include crowing before daybreak— about two hours early, in fact. Like 4:00 am when the sun doesn't come up until 6:00 am. That would be the same 4:00 am during which I still want to be sleeping.

For those whose circadian clock is a little later, there is crowing in response to daylight. The sun is now up! This is better. However, crowing during the day is likely to be noisier. Roosters often choose a vantage point for their crowing that will make it possible for their crowing to be heard far and wide. This helps them to establish and maintain their dominance.

Which brings us to the second reason, which is that roosters crow to defend their territory. This can be at any time. The crowing rooster lets the other roosters know that he is "the cock of the walk," and they should not trespass or there will be trouble. It could result in a cock fight. Depending on the jurisdiction, that could be illegal.

Third, a related reason, is that roosters crow to set boundaries to their territory. This can be blamed on the fact that their ancestors came from jungles in countries like Thailand, Myanmar, India, and China. It is very hard to see through the dense vegetation of a jungle. Crowing was a means of communication between different groups of birds. Roosters turned out to be good at this. They crow to let other flocks know where they are, and that has the effect of setting boundaries.

Chickens are good at hearing, so all this crowing helps them understand if they are near another flock. Being near another flock raises the question of fight or flight. According to one internet source, chickens don't like to fight. (Yes, chickens are ***chicken***.) They don't like to fight because fights cause injuries, loss of territory, and even death. Those

seem like reasonable reasons to be chicken.

Fourth, roosters crow because they wake up with a surge in testosterone and feel like mating. They crow to impress the ladies with whom they would like to mate. This involves throwing out one's chest, flapping one's wings, and letting out a very boisterous crow.

Fifth, roosters crow after mating. Enough said.

Sixth, roosters will crow when one of their hens lays an egg. I get this. I like eggs. Laying an egg is a good thing. I just think that roosters shouldn't take much credit for it. The hens are doing all the work.

Seventh, roosters crow when other roosters crow. This is not good news. If one rooster crows while I am still sleeping, others are likely to go off as well. These others are referred to as "subordinate" roosters, who are lower down on the— wait for it— "pecking order." A rooster may have a circadian rhythm urging him to crow before the dominant rooster in his flock, but he will hold his circadian urges in check and wait for the dominant rooster to crow first. The dominant rooster then leads the other roosters in a crowing ceremony or competition. This is a good reason to not have more than one rooster.

Eighth, it is believed that roosters crow during the night because something disturbs them. Nobody knows for sure, but it is possible they crow because they hear something or someone around the chicken coop, or a car headlight wakes them up, or a machine starts up and makes a noise. The rooster crows as a warning to the others in the flock. Danger!

Ninth, it is believed that roosters crow sometimes for no reason at all. Or just for fun. Or because they are bored. They are roosters. They don't need a reason.

Internet sources indicate that people who own multiple roosters can distinguish their different crow sounds. There is apparently a subtle difference in each rooster's crow. (For the record, I never imagined using the word "subtle" in the same sentence as "rooster's crow." We live in an amazing world.)

While loud enough to irritate people or wake them up, it is claimed that a rooster's crow is not all that loud. When measured in decibels, it's

about the same as a barking dog, which is around 90 decibels. (That really doesn't help me. I don't like the sound of barking dogs, either.)

The crow of a rooster can vary in length. The rooster can go on as long as he wants. It's a free country. Most will crow for only a few seconds, but there are reports that a Kosovo Long Crower Rooster will go for 20 to 40 seconds, and in exceptional cases, as long as 60 seconds. It's hard to believe that roosters have been bred to be long-winded, but reports are that poultry-breeders really like them. These roosters must have other redeeming features.

So there you have it. Everything you need to know about the crowing of roosters. You are welcome.

Just don't ask me why there is air.

I'll Drink to That

I went to college a long time ago. If I recall, it was just after the Great Pyramid of Giza was completed for the Fourth Dynasty pharaoh Khufu (also known as Cheops). He died; his nation mourned; his children schemed; and I went to college. Something like that.

Okay, it wasn't that long ago, but the part about going to college is correct. It was Harvard College, and at the time, it was for men only. There was a relationship with Radcliffe College, a women's college, but many activities were not co-ed. For example, the swimming test. Each of us freshmen had to pass a swimming test. In the nude.

I'm not kidding. I showed up at the pool in my swimming trunks, and was told that I had to take them off before I dove in. The official explanation was that lint from swimming suits clogged up the drains, so swimming suits were banned. The unstated but more likely explanation was the desire to adhere to the Greek ideal of beauty, which included nudity while exercising or performing on athletic fields and at the Olympic games. We are reminded of this by all of those nude statues of Greek men with perfect bodies, remarkably unlike mine. I think there may have been a third reason, which is that nude swimmers swim faster. Much faster. The swimming tests go more quickly. ***Much*** more quickly.

So there I was at this weird college for men. During the first week there was a social event so that we nude swimmers could get to know each other with our clothes on. I dutifully showed up, shook a few hands, and listened. After half an hour, it was clear that the three main topics were women, sports, and alcohol.

I didn't know anything about women, sports, or alcohol, so I went back to my room. And stayed there for four years.

I still do not know much about women or sports, but I have learned some things about alcohol. I will be sharing some of those things, in the hope that you will forget that I don't know much about women or sports.

When it came to learning about alcohol, I was blessed to get off to a slow start. My parents did not drink. They didn't say that drinking was bad, they just didn't do it. My father was a United States Marine for 30 years, but he did not drink, smoke, or swear. He was so disinterested in drinking that when he was stationed on Johnston Island in World War II, they put him in charge of the alcohol. They knew he wouldn't touch the stuff himself.

Later in life, when my father was retired, I convinced him to try a glass of wine before going to bed at night. This was a very risqué step for him. He ended up enjoying what I call the "cough syrup" variety of wine, which includes Manischewitz Concord Grape Wine and Mogen David Concord Wine. They are both very sweet and syrupy. I also like these wines, especially when I have a cold.

So I wasn't raised in a drinking family, and that was fine with me. Once, when I was 14, a friend invited me over to his house when his parents were out. He went to the secret cabinet and brought out a bottle of red wine. I drank a few sips. It didn't taste good. That was my only experience before heading off to college. I wondered what the excitement was about.

Harvard is in Massachusetts, and the legal drinking age when I was there was 21. However, nobody— not the college administration and certainly not the local liquor shops— wanted to enforce the age limit. So it was easy to get alcohol.

It was made clear to me right away that ***real*** men drank beer. So I tried it. My initial reaction was that it tasted like bad water. Who would want to drink that stuff? But everybody was drinking it, so I did, too. I gradually got used to it.

Today, I cannot imagine eating ***sushi*** without drinking beer (usually a Japanese beer like Asahi, Sapporo, or Kirin). For me and my wife Elizabeth, our favorite date is sushi and beer, followed by a movie. Sometimes we are so happy after the sushi and beer that we don't make it to the movie. (It's okay. The main thing is that we are happy.)

By the way, I have never been drunk. I don't believe in it. It's not necessary. Life is exceptionally interesting while sober.

Okay, while it is true that I have never been drunk, I have gotten

"buzzed" and felt a little high a few times. And once I felt woozy and had to go lie down. An hour later I was okay. I was probably close to being drunk that time.

The point is that I did my best to avoid being drunk. That meant that I had to learn my physical limits, so I did some testing. I found that I could drink a can of beer every 30 or 40 minutes for several hours and not get drunk. I could feel the alcohol, but I could still walk and talk normally. That 30 or 40-minute interval gave my body enough time to process the alcohol. When it came to hard liquor, the important thing was to keep drinking water. Lots of it. Before, during, and after drinking hard liquor.

Looking back, it seems to me that we humans often drink things that don't taste good until we get used to them. And we get used to them because everybody else has gotten used to them. We associate drinking with fun social events, camaraderie, prestige, or a positive self-image. The first time you drink a dry champagne it may make your sinuses shriek and your ears curl; your first gulp of a cognac may inflame your head and make you want to beat it against a wall. But they are fashionable and expensive drinks. Sophisticated people say they are wonderful, so we learn to like them. As the phrase goes, "it's an acquired taste."

Today, I celebrate the alcoholic drinks that were ***not*** my acquired tastes. These are the drinks that tasted good to me the first time I drank them.

When I turned 21, I was eligible to attend wine tastings. The first one I went to featured Rhine wines. I tasted Riesling, Traminer, and Gewurztraminer, all white wines that are fresh, fruity, and slightly sweet. I loved them at first taste, and I still love them today— as well as sweet white wines like Moscato and Asti Spumante, and dessert wines like Barsac.

The next thing I really liked the first time I drank it was rum and Coke. This was known as the "poor man's" drink, which might have been true when rum was cheap. I still like to celebrate once in a while with rum and Coke, accompanied by home-popped popcorn. (Actually, my taste has evolved, and I now use Pepsi instead of Coke, for a sweeter taste.)

The next thing I liked the first time I drank it was port. About twenty years ago, Elizabeth and I were traveling in Europe and we got bumped up to Business Class on a Luftansa flight. During the meal, we were served port that was absolutely exquisite. We asked and were told that it

was Graham's 10-year-aged Tawny Porto. Two years ago we traveled to Portugal and visited the city of Porto, the world center of port production, to confirm this important discovery. We sampled and compared a number of ports, and I can confirm that Graham's 10-year-aged Tawny Porto is still our favorite.

The most recent alcoholic beverage that I liked the first time I tasted it requires some explanation. It was the result of a long search, which I am of course compelled to tell you about.

Ten years ago I was in Indianapolis having dinner with some fellow Rotarians. One of them ordered a porter. On a whim, I decided to order one as well.

Porter is a dark beer that was developed in London in the early eighteenth century. The name supposedly came from the fact that it was enthusiastically consumed by street and river porters. It was dark because it used brown malt. According to our friends at Wikipedia (I couldn't find any friends at Britannica), porter was so popular that it became the first beer style to be brewed across the world. By the end of the eighteenth century, they were making it in Ireland, North America, Sweden and Russia. Strong porters were marketed under the name Stout Porter, a drink that was later referred to as Stout, in order to confuse people for the next two centuries.

So back to that dinner. I liked the porter that was served, so I went to my local liquor store to explore. I was on a quest. Something was drawing me in; I felt a kind of cosmic pull. I was compelled to find the perfect porter. I started by buying six different brands, drinking them with great seriousness, and then rating them. I went back to the store and bought a few more. More tasting and rating. The quest continued.

Then one day I walked over to the store shelf that held the porters, and there it was, like a light shining in the alcoholic dark: Alexander Keith's Nova Scotia Style Brown Ale. It didn't say "porter," but it was brown. This had to be it. I bought a six-pack and took it home. Almost trembling, I popped the cap on the first bottle and took a sip. Immediately, I knew that the quest was over. I loved it from the first taste. And why not? It was made by ***Keiths.***

Alexander Keith's is a brewery in Halifax, Nova Scotia, Canada. It is part

of Anheuser-Busch InBev, a holding company based in Leuven, Belgium, which owns over 400 beer brands globally. The brewery was founded in 1820 by Alexander Keith, who had immigrated from Scotland three years previously.

My family and I were in Halifax, Nova Scotia forty years ago, when I attended a Law of the Sea Institute conference that was held there. While we were in Halifax, we visited the Alexander Keith brewery. We bought some beer glasses with the company logo and brought them home. It had not occurred to me during my "porter quest" thirty years later that Alexander Keith made a beer that was like a porter. I was delighted to have found it.

So here's my advice: Life is too short to spend much time learning to like drinks that don't taste good to you. Just drink what you like the first time you taste it. It doesn't matter if the drinks you like are fashionable or "sophisticated." If you like them, that's all that counts.

I am not the only one who thinks this. Years ago we toured the Mondavi vineyard in Napa Valley. At the end of the tour, the guide brought out a number of Mondavi wines for us to taste. After the tasting, she said: "Wine should be enjoyed. So buy and drink whatever tastes good to you. Don't worry about what other people think. Just drink what you like."

I'll drink to ***that***.

Naps

I love naps. I have always been a napper. I was born to nap.

My earliest memory of napping is the naps I took as a toddler. I took naps by standing in front of a chair, leaning over, placing my head on the chair's seat, and falling asleep. Of course, I always chose a chair with a ***cushioned*** seat. So there I was, standing and napping at the same time. (Looking back, I am pretty proud that I was able to do two things at once.)

In high school, I had trouble staying awake during my first class after lunch. I would sit there in English class, my eyes crossing, trying to stay awake while we scanned a poem in iambic pentameter (thank you, Shakespeare, for that very dreamy sonnet). Day after day, I struggled to stay awake after lunch.

I promised myself that if I ever had control over my life, when I became sleepy, I would sleep. I didn't know when I promised myself perpetual, blissful napping that I was following good scientific advice. I didn't nap because it was the smart thing to do. I napped because ***I was sleepy.***

When I went to college, I took a nap every day after lunch, usually for an hour. This gave my body the opportunity to focus on digestion. (As mentioned, it has always been hard for me to do more than one thing at the same time.) I think the nap also helped me to stay awake at night, which was important because I did most of my studying between 7:00 pm and 2:00 am. Research suggests that a 60-minute nap improves alertness for up to 10 hours.

What I didn't know at the time was that those naps probably helped me to learn better. For example, a Harvard study concluded that a 45-minute nap improves learning and memory. And research by Dr. Sara Mednick, a psychologist at the University of California-Riverside, concluded that people performed just as well on a test after a 60-to-90-minute nap as they did after a full night's sleep. She also found that an afternoon nap was about equal to a dose of caffeine for improving perceptual learning. Not only that, but people who napped did a ***better*** job on a verbal word-recall

task an hour after waking compared with people who took caffeine.

(I didn't drink much caffeine in college. Now I know why. I didn't need it. I was napping.)

After college, I continued to take naps throughout my work career. What I learned later was that a nap can make you more creative and intelligent on the job. A nap at the right time is said to improve alertness, memory, and coordination. It can also make you more capable and productive.

Because of these benefits, some businesses are making it easy to take naps on the job. Ben & Jerry's, Zappos, Uber, and Google have reportedly installed dedicated nap spaces in their headquarters. And these naps are not just for the 35% of all Americans who are sleep-deprived, defined by the American Sleep Association as those who get less than seven hours of sleep each night. Naps are also for those who get the recommended seven to nine hours of sleep each night. Even when you are well-rested, a nap can improve your performance in areas such as reaction time, logical reasoning, and symbol recognition.

A nap can also improve your mood, as in "not being tired and cranky." No wonder there is growing interest in public napping facilities and sleeping pods at work. (Wouldn't it be awesome if we could reduce crankiness?)

When is the right time to nap? According to Jennifer Ackerman, writing in *The Boston Globe:*

> even when we are getting a full-night's rest, we're still programmed biologically to take a nap in the early afternoon. Our bodies naturally slow and often produce melatonin between 1 and 3 p.m.

Entire countries are aware of this. That's when they have their siestas!

The length of your nap can make a difference. Ackerman reports that there are five stages of sleep. Stage One is when you've just begun to sleep. Stage Two is light sleep, which is typical of naps that are up to 30 or 40 minutes in length. The proverbial "cat nap" fits in this stage. The nap is restful, but it is easy to wake up and get back to work without being groggy. Stages Three and Four are deep sleep, during which you can dream freely, but if you wake up, you will be groggy.

If you want to avoid the grogginess of Stages Three and Four, you need to keep sleeping at least 90 minutes. That will take you to Stage Five, which consists of rapid eye movement (REM) sleep. This is the stage in which most of your dreaming will take place. If you sleep this long you will be more rested, will wake more easily, and will find that your nap boosted your creativity and mood. The idea, then, is to avoid waking up in the 45-90-minute zone, the "deep sleep red zone."

I worked at nine organizations during my career. Each one could put up a sign: KENT KEITH SLEPT HERE. (That would be nine signs, admittedly not as many as the MOZART SLEPT HERE signs found on nearly every building in Salzburg and Vienna.) My naps at work were almost all 20 or 30 minutes. I would set an alarm on a travel clock or my digital wristwatch. At four organizations, I slept on the floor in my office. (That was one reason for a short nap— the floor was hard!) At two organizations, I slept on a couch in my office. At one organization, I slept on a lazy boy in the office. At another organization, I slept on the floor of a conference room.

My best routine was at the YMCA. I went downstairs to the gym at 11:00 am, worked out, showered, had lunch at the in-house café, went back to my office, and took a nap on my couch. Exercise, eat, sleep. It was perfect! At the other organizations, I usually ate lunch at my desk and then took a nap, all within the approved lunch hour. If other people wanted to go out for lunch, fine. I wanted to stay in and sleep.

This napping, especially when lying on the floor, took a few people by surprise. When I was an Associate at Cades Schutte Fleming and Wright, a law firm, my office had a strip of glass that allowed people in the hallway to look into my office to see if I was there. One day during lunch, I was napping on the floor in my office when Fred Schutte, one of the senior partners in the firm, looked through that strip of glass and saw me laid out on the floor. He opened the door and called out, "Kent, Kent, are you okay?" I think he was really worried about me. He might also have been worried that a rumor would begin to fly around town about an Associate that had been overworked so badly by his law firm that he had collapsed and died on the floor of his office.

A couple of years later, it happened again, with a different result. I was a Coordinator in the Office of the Director of the Department of Planning and Economic Development. The Director was Hideto Kono, and my office was right next to his. My office did not have a glass panel, so you couldn't

see inside when my door was closed. One day during lunch hour, I was asleep on the floor when Mr. Kono knocked and opened the door. I awoke and stood up. He asked me a question, and I answered. Then he smiled and said: "Please return to your previous position." So I did. ZZZzzzz.

Years later, at Pacific Rim Christian University, the encounter didn't go as well. I was asleep on the floor in a conference room, with the lights out and a little tag on the door handle that said: "In Use." One of our young female students wanted to use the conference room. She didn't notice the tag on the handle, and opened the door. I heard the door open, began to sit up, and said: "Can I help you?" She screamed, turned, and literally ran out of the office. I don't think she came back the next semester. She is probably still running. I feel badly about that.

When it comes to naps, I can usually fall asleep within a few minutes after I lie down. The reason is that I only lie down for a nap when I am ***already sleepy***. My body is telling me it's time to sleep. However, even when my body tells me it's time to sleep, I am not good at sleeping sitting up. As a result, I am not good at sleeping on overnight flights. My body really wants to be horizontal when it sleeps.

That's why my very-best-ever sleep experience on an airplane was the 18½-hour nonstop flight I took from Newark, New Jersey to Singapore. It was a Singapore Airlines flight, and every seat was Business Class (my client was generous!). On this flight, every seat flattened out to become a 6-foot bed with a thin but adequate mattress. I was in heaven. I slept soundly for eight hours. Talk about arriving fully rested!

For many years, I did a lot of long-distance driving on the Mainland. Whenever I began to feel sleepy, I looked for a place to pull over. I would push the seat back, set my alarm for 20 minutes, fall asleep quickly, and wake up refreshed and ready to drive safely for another few hours. Those naps probably saved my life. The American Sleep Association reports that drowsy driving is responsible for as many as 1,550 fatalities and 40,000 nonfatal injuries annually in the United States.

Naps are reported to help you live longer and healthier. In addition to not dying in a car crash, napping is reported to reduce stress and lower the risk of heart attack, stroke, diabetes, and excessive weight gain. A British study indicated that just ***planning*** to take a nap reduces blood pressure. As Jennifer Ackerman says, naps make you smarter, healthier, and

safer. I didn't know all this when I became a committed napper. I just knew that I liked naps.

Many years ago, a friend told me that I should establish a certain habit that would help people to think that they know me ***really well***. If a person hasn't seen me for a few years, he can ask me if I still have that habit, and when I say yes, he will feel like I am still the same good old Kent he has always known. Well, you guessed it. That habit is my napping. You don't even have to ask. I'm still doing it.

Good night!

Dancing

I am not known as a good dancer. There is a reason for that. The reason is that *I am not a good dancer*. (Sometimes perception and reality match up really well.)

Actually, what I mean is that I am not good at dancing whatever dances people are dancing these days. I was trained in three old-fashioned dances: waltz, foxtrot, and cha-cha.

Yes, I know, I know. You have never heard of them. But that is what they taught us at cotillion.

Yes, I know, I know. You have never heard of ***cotillion*** either.

Okay. Cotillion was a dance class. I admit that's not what the dictionary says. According to one dictionary, a cotillion was a dance that was originally for four couples in square formation. It was a courtly version of an English country dance, the forerunner of the quadrille and, in the United States, the forerunner of the square dance.

According to another dictionary, however, cotillion was an 18th-century French dance based on the ***contredanse***, or in the United States, it was a formal ball, especially one at which debutantes are presented. A debutante was defined as an upper-class young woman making her first appearance in fashionable society.

For us, it was none of those things. It was simply a rite of passage back in the late 50s and early 60s for nice boys and girls. Nice boys and girls needed to learn how to dance nicely.

At the time, my family lived in Vista, California, a small city north of San Diego. It was common in our neighborhood for young people in the 6th or 7th grade to dress up nicely and go to a large hall at night to learn dances that, years later, nobody will have heard of.

There was a stage at one end of the hall, which is where the instructor

did her instructing. She told the boys to line up on one side of the hall and the girls on the other side of the hall. The instructor taught the new dance steps, and then she said: "Gentlemen, get your partners." That was the cue for us boys to cross the hall to ask girls to dance. It was an open process: Each boy could ask any girl.

I am not endorsing this process. For one thing, I don't think it was ever imagined that a girl would be allowed to say no and decline to dance with any boy who asked. It was male chauvinistic. Fortunately, before the class was over, we rotated partners, so everybody got the chance to dance with everybody, at least briefly. That was part of the old definition of cotillion: the frequent changing of partners.

It turns out that the boys thought that some girls were more attractive than other girls. While the instructor addressed the boys as gentlemen, some boys decided to not be gentlemen. (Some of these boys, I suspect, grew up to be ***men*** who were not gentlemen, either.) These non-gentlemen would literally ***run*** across the hall to ask a girl to dance. There was a specific girl they really wanted to dance with, so off they went.

I, of course, wanted to be a gentleman, so I did not run. I walked. It was sort of a nonchalant stroll. Which meant that by the time I got to the other side of the hall, there were few choices. That was fine. The girls I danced with were nice girls.

The three dances we learned were the waltz, the foxtrot, and the cha-cha. For those of you who have somehow escaped even a scintilla of information about these dances, I offer herewith a simplified explanation. Here we go.

The waltz is 3/4 time, which means each measure of music is three beats, 1-2-3. The foxtrot is 4/4 time, which means that each measure of music is four beats, 1-2-3-4. With those two basic rhythms, you can dance to almost any music. Especially since, from a dancing perspective, 3/4 time can also be 6/8 time, and 4/4 time can be 2/2 time, through the magic of multiplying and dividing while still dancing.

When we danced, we struck a formal pose. The boy held the girl's right hand in his left hand, both hands raised to at least shoulder level. The boy's right hand went behind the girl's back, to hold her gently, while her left hand usually went to the boy's shoulder, where it rested lightly. Striking

that pose was the most dignified thing I had ever done. It made me feel very grown up.

The pattern of both dance steps is a square box. You move your feet within that box pattern. With the foxtrot, both feet go in succession to each corner of the box. With the waltz, one foot moves diagonally across the box, which makes it easier to dance more quickly. In fact, it makes it possible to careen around a room, joyously dancing to a wonderful Viennese waltz, 1-2-3, 1-2-3. I thought it was grand.

The cha-cha is a specialized dance. The steps are 1-2-cha-cha-cha. You and your partner turn to the side (that's the 1-2), then you come back and stomp your feet facing each other (that's the cha-cha-cha). I don't remember ever dancing the cha-cha outside of cotillion. I didn't think it would be safe.

I became pretty good at the waltz and the foxtrot, and then my social world collapsed, imploded, and was generally destroyed. A new dance took the nation by storm. It was called the Twist. It had nothing to do with 3/4 time or 4 /4 time or boxes or anything. Whatever it was, I couldn't bring myself to do it. Partly, I was too proud. After all, I was a traditionally trained graduate of a formal cotillion program. But mostly, I just wasn't sufficiently coordinated. I couldn't move that many parts of my body in different directions at the same time.

A dark shadow was cast over my dancing life. Girls would not dance with me. It was too embarrassing for them to dance the waltz or foxtrot when everybody else was doing the Twist. I didn't blame them. I understood. I stopped going to parties.

But the planet turned on its axis, years went by, and we got older. By the time we got to high school, we had changed. We were under the influence of hormones. We didn't want to be twisting at a distance from each other, we wanted to be close. We wanted to hold each other while we danced. Suddenly, the waltz and foxtrot were not such a bad idea.

However, there was an even better idea: the ***sway***. It wasn't officially known as that, but that is what it was. You assume the formal waltz or foxtrot position, and then just stand together, feet firmly planted, and sway to the left and then to the right, as though you are on a gently rocking boat. Occasionally, you might remember you are supposed to be dancing,

and you might take a modest half step, before swaying again. In any case, there was no reference to the rhythm or the beat or anything else, because nothing else mattered much. The idea was to be together. The goal was not dancing, it was ***holding***. As close as the chaperones would let you.

I am happy to say that the world of ballroom dance is still alive today, both socially and competitively. As of 2019, there were an estimated 54,000 dance studios in the United States generating $4 billion in revenue. Those dance studios were presumably teaching ballroom dancing, along with ballet, hiphop, Latin dances, and modern dance. Ballroom dance clubs abound, with their total national membership estimated in the millions. There are wonderful movies about ballroom dancing like ***Strictly Ballroom***, an Australian movie directed by Baz Luhrmann, and ***Shall We Dance?*** starring Richard Gere. There are also TV shows like ***Dancing with the Stars.***

Competitive ballroom dancing is referred to as "dancesport," and it is indeed recognized as a sport by the International Olympic Committee. Competitive dancing includes the waltz, Viennese waltz, tango, foxtrot, and quickstep, as well as the Latin pasodoble, Spanish bolero, Cuban bolero, samba, rhumba, mambo, cha cha, East Coast swing, jive, and salsa, to name only a few.

Synchronized dancing appears to be good for our health, not just because we are getting exercise. According to Marta Zaraska in her book, *Growing Young*:

> …Singing and dancing release social neurohormones, such as endorphins and oxytocin, into the body… This may in part explain why ritualized dancing and singing is so widespread across cultures… When we dance or sing in synchrony, as opposed to just jigging or humming in dissonance, the endorphin kick can double.

Endorphins are a good thing. They inhibit pain and can produce a feeling of euphoria— without opioids. Notice that this is about the benefits of synchronized or ritualized dancing. (I'm hearing waltz and foxtrot here, not the Twist.)

So that's it. We don't have to go to cotillion, but we should dance. We should dance together, in synchrony, no matter where we are from or what

we believe or how differently we may behave the rest of the time. We should dance.

Or at least sway a little.

Mitochondria

You might not want to read this essay. I'm just warning you. Reading this essay could change the way you see yourself and the universe in general.

You don't have to read it. You can just skip to the next essay. I'll never know. Even if I knew, I wouldn't tell anybody. Please feel free to stop reading now.

Okay, for those who are still with us, this is not about a secret international cult or the apocalyptic end of the world. This is about the tiny mitochondrion, which joins with others like itself to become the plural, *mitochondria*. Mitochondria live within our cells and serve as "batteries" powering various cell functions. Our lives literally depend on them.

I first learned about mitochondria from Dr. Lewis Thomas in his essay, "The Lives of a Cell." He described how our bodies are occupied by these tiny organisms:

> At the interior of our cells, driving them, providing the oxidative energy that sends us out for the improvement of each shining day, are the mitochondria, and in a strict sense they are not ours. They turn out to be little separate creatures… they have maintained themselves and their ways, replicating in their own fashion, privately, with their own DNA and RNA quite different from ours… Without them, we would not move a muscle, drum a finger, think a thought.

You didn't know about these little critters, did you? I didn't think so. Neither did I. I am still trying to get used to them. It's a little unnerving. Just think about it. There are tiny organisms within our cells that affect everything we do, and they are independent little buggers with their own DNA and RNA. Whoa.

I'm not claiming there is some kind of a conspiracy of silence about this, but I don't remember hearing about mitochondria in my ninth grade biology class. We talked about cells, yes; mitochondria, no. Maybe our teacher thought we weren't ready. Maybe the head of curriculum thought

the shock would be too great. Maybe they were right. So brace yourself. Here's what you need to know.

Mitochondria are found in almost all cells that have clearly defined nuclei. (Mitochondria have standards: If you are a cell without a clearly defined nucleus, forget it.)

Mitochondria are usually round or oval in shape. It is thought that they evolved from primitive bacteria. They have two distinct membranes and they reproduce by binary fission. They can quickly change shape and move around the cell when needed. (That probably makes them the world's tiniest shape shifters.)

The primary function of mitochondria is to generate a lot of energy in the form of adenosine triphosphate or ATP. This is energy that cells need to carry out their functions. That's why mitochondria are referred to as "batteries" or "the powerhouse of the cell." Mitochondria break the chemical bonds of glucose to release energy. When the cell needs more energy, mitochondria can reproduce by growing larger and then dividing.

Our red blood cells don't have mitochondria, but liver cells and muscle cells have a lot. That's because tissues like muscles are designed to do more work, and they need more mitochondria to do it. A good example is cardiac cells. Heart muscles have a high demand for energy, because of all those contractions and elongations that go into our heartbeats. To meet that high demand for energy, they need a lot of mitochondria. In the same way, when you exercise vigorously, you increase the demand for energy, which in turn increases the number of mitochondria in your muscle cells. (Just wanted you to know in case you ever feel the urge to exercise vigorously.)

The mitochondrial genome is inherited maternally. This has been really helpful in research on human evolution and migration, since it makes it possible to follow a single line of ancestors. Some scientists who use mitochondrial DNA in their research believe that they have traced all humans alive today to a single woman living about 200,000 years ago (see the reference to "African Eve" in the essay on how we are all relatively related).

Another study using the mitochondrial genome indicates that when humans migrated from Asia to the Americas about 30,000 years ago, they stayed for about 15,000 years in Beringia before heading over to America.

Beringia was a large area that included a land bridge in the Bering Strait, running from what is now Siberia to what is now Alaska and Canada. It must have been great to stop and relax and smell the flowers for 15,000 years before moving on. Alas, about 12,000 years ago, glaciers melted and the sea level rose. Beringia gradually sank beneath the water until the land connection was lost. A real bummer. Before it was under water, though, it must have been really nice.

But I digress.

Mitochondrial DNA is highly susceptible to mutations. The accumulation of mutations throughout life are thought to play an important role in aging. Mitochondrial dysfunction is implicated in several diseases, including Alzheimer's disease and Parkinson's disease. Viruses, parasites, and heavy metals like mercury and lead can damage mitochondria so they no longer work properly.

These little critters do a great job of taking care of us, so it's entirely appropriate that we should take good care of ***them*** (so they can continue to take care of ***us***). One opinion is that it is good for mitochondria if we eat fiber-rich foods that help detox poisons in the body. Another opinion is that omega-3 fats can help build mitochondrial membranes. Avocados, nuts, and seeds can also help.

Then there is the report that heat therapy, like sauna use, can increase the efficiency of mitochondria. The idea is that the heat increases the energy needs of mitochondria, which results in better use of oxygen in the blood. There's even a name for it: oxidative phosphorylation. The recommendation is two to three sauna sessions per week for at least 10 to 15 minutes each time. Just tell your friends that you are going to the sauna to take good care of your mitochondria. Your friends will probably be afraid to ask.

I told you at the very beginning that reading this essay could change the way you see yourself and the universe in general. Now that you know about these tiny independent critters that affect everything you do, it is possible that you are seeing yourself a little differently. Let's move on to how you see the universe in general.

I am a fan of most of the Star War movies. We all know about the Force. We are told that the Force runs strong in some individuals. But what

is the Force? Is it physical or spiritual? How is the Force embodied in an individual? If it is physical, where does it exist?

The answers can be found in an article by Mark Hom posted on the Elsevier SciTech Connect website in 2015. He considered a number of themes from the Star Wars series and said:

> A better theme for the entire ***Star Wars*** saga is the pervasiveness of the Force**,** a concept that George Lucas borrowed from modern biology. The Force is the inner source of energy that powers all living things and is manifested as an intracellular symbiotic life form called ***Midichlorians.*** The name is a combination of ***Mitochondria*** (the endosymbionts that power your cells) and ***Chloroplasts*** (the endosymbionts that perform photosynthesis in plants). In this dialog from ***Star Wars Episode I: The Phantom Menace***, the source of the Force is revealed:
>
> *Anakin*: Master, Sir… I heard Yoda talking about Midichlorians. I've been wondering: What are Midichlorians?
>
> *Qui-Gon*: Midichlorians are a microscopic life form that resides within all living cells.
>
> *Anakin*: They live inside us?
>
> *Qui-Gon*: Inside your cells, yes. And we are symbionts with them.
>
> *Anakin*: Symbionts?
>
> *Qui-Gon*: Life forms living together for mutual advantage. Without Midichlorians, life could not exist and we would have no knowledge of the Force. They continually speak to us, telling us the will of the Force. When you learn to quiet your mind, you'll hear them speaking to you.

Holy lightsaber! Those tiny independent critters with their own DNA and RNA not only affect everything we do, they are also our only connection to the Force. If we want to know the will of the Force, we have to listen to mitochondria. ***Holy lightsaber!***

So what's my advice? It's simple: Take care of your mitochondria. And if you want the Force to be with you, maybe you should eat an avocado and jump into the sauna.

Mindfulness

I was at home in our den. (You can tell it is our den because it has all the essentials: two couches, a coffee table, a TV, a desk with a computer and printer, a Keurig machine, an elliptical exercise machine, and a wine rack. During occasional flights of fancy, we also think of it as our Africa Room, since the walls are covered with very enlarged photos, printed on canvas, from our adventures in Africa. The largest photo is the profile of a lioness we met by telephoto lens. That is by far the safest way to meet a lioness who is attentively watching over her cubs.)

But as I said, I was at home in our den. Specifically, I was at the desk, in front of the computer, reading a book. Even more specifically, I was reading the chapter of the book that was about mindfulness meditation. The book said that there are lots of benefits for people who consistently meditate this way. For example, they get a boost in empathy, a reduction of stress, and a decrease in cravings. That sounds very good indeed.

So, you might ask, what is mindfulness?

I wanted to know, too, so I went to the internet. One website said: "Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing." Another website said: "Mindfulness means maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment, through a gentle, nurturing lens."

I had to admit that mindfulness is a good thing, and I was not practicing it. There are a lot of things that I don't notice or think about. I was clearly missing the benefits of mindfulness.

So there I was, sitting at my desk, mindful of my lack of mindfulness, ready to commit myself to being truly mindful. And the first thing that my gaze settled on was the stapler next to my computer. My old, black, slightly rusted stapler from Office Depot.

I use that stapler every day. In fact, ***several*** times a day. I hold a few

pieces of paper together, place them in the mouth of the stapler, push down with appropriate gusto, and ***voila,*** the papers are fastened. I don't think about it. It just happens.

Now, I was focusing on it. That stapler filled my mind. I was fully present with it. It was like the whole world was just me and that stapler.

But then my mind wandered. I began to ask myself questions. What do I really know about staplers? Who came up with this idea? Whom should I thank for this marvelous machine?

> [Note: Teachers of mindfulness, when they aren't offering you a book or a training course, point out that your mind can wander while you are trying to be mindful. It's okay, they say. Don't judge yourself. Just try to return to the present moment. My present moment was wondering: Who came up with this stapler idea? Whom should I thank for this marvelous machine?]

While my mind wandered, I sought out the mindful folks at Wikipedia. They informed me that people were using more and more paper in the 19th century. Advanced economies were becoming more bureaucratic. There were more rules, more documents, and more papers to file. Unfortunately, there was no efficient paper fastener. It was hard to find the end of one document and the beginning of another, because the documents weren't appropriately separated and fastened. (There was an urban legend that people were standing in their offices with one set of papers in their left hands, and another set in their right hands, not knowing what to do with them. It was a crisis.)

Several inventors heard the call and worked hard on various machines. Finally, in 1877, Henry Heyl filed a patent for the first machine that would both insert ***and*** clinch a staple in one step. That's why he is considered by many to be the inventor of the modern stapler. The first stapler to hold pre-formed staples, lined up in a "magazine" ready to use, came out in 1878. The stapler grew in popularity. By 2012, $80 million worth of staplers were sold in the United States. The dominant manufacturer is Swingline.

Our modern staplers, those small desktop devices, just sit there nonchalantly on our desks or in an easily accessible drawer. They may look modest, but their technology is impressive. These modern staplers use "flat clinch" technology. The staple legs pierce the paper, and then they

bend over and are pressed flat against the paper. It is all done in one smooth, continuous action. Crunch! Done. Pierced, flattened, and firmly fastened.

It wasn't always that way. Earlier staplers had separate steps for piercing and fastening and the staples were not flat. Making the staples flat meant that fewer people would prick their fingers on the staples. It also meant that a stack of stapled papers was flatter, which in turn saved on filing and binder space. Everybody was happy about that, except the guys who made file cabinets and binders. Flatter documents meant people needed ***fewer*** file cabinets and binders. (Sometimes, for some people, free enterprise is a total bummer.)

All in all, when you think about it, staplers are pretty impressive. (I was thinking about it, and I was impressed.) I knew that I would never look at a stapler the same way again. (And neither should you.)

I was trying to gently (without judging myself) return to mindfulness of the present, when my gaze settled on the paper clip next to my stapler. I was really taking it in— the paper clip's color, its shape, and its position on the table next to the stapler. That paper clip filled my mind. I was fully present with it. It was like the whole world was just me and that paper clip.

And then my mind wandered. I just couldn't help it—my mind wandered again. We depend on paper clips, but do we really understand them? Do we appreciate them? Do we give them their due? And who invented paper clips, anyway?

Off to the internet I went again to find the answer. According to several possibly reliable sources (Encyclopedia Britannica, where are you when we need you?), paper clips were invented by Johan Vaaler, a Norwegian inventor with degrees in electronics, science, and mathematics. He invented the paper clip in 1899. Norway did not have patent laws at the time, so he received his patents in Germany in 1899 and the United States in 1901. Word on the internet is that Vaaler was an employee at a local invention office when he created the paperclip. The man was doing his job.

I stared at that paper clip and realized I was staring at pure genius. A single piece of wire, folded back on itself, creating enough tension so that papers placed between the wires are held in place. Paper clips are easy to

put on, and easy to take off. The paper clip might leave an indentation on the pages, but it leaves no holes the way a stapler does.

There have been many paper clip designs. The first double-oval clip, the Gem, was launched in the early 1900s by Gem Manufacturing Ltd of England. According to didyouknow.org, "the paper clip remains as one of the most-used items of all time."

Years ago, I read a book by J. Paul Getty titled ***How to Be Rich***. (It was not about how to ***get*** rich, it was about what to do once you were ***already*** rich, so I have no idea why I was reading it.) I remember only one thing from that book. Getty claimed that he convinced everybody in his companies to re-use their paper clips, and they saved $50,000. I thought that was a cool paper clip story until I learned about the Norwegians.

According to an article on "The History and Invention of the Paperclip" published on Thoughtco.com:

> During World War II, Norwegians were prohibited from wearing any buttons with the likeness or initials of their king on them. In protest, they started wearing paperclips, because paperclips were a Norwegian invention whose original function was to bind together. This was a protest against the Nazi occupation and wearing a paperclip could have gotten them arrested.

Wow! That is so super cool. After learning all this, I will never look at a paper clip the same way again. (And neither should you.)

I was returning to mindfulness when I noticed a rubber band that was next to the paper clip that was next to the stapler. The rubber band was light brown and mostly elliptical, just lying there, ready to be of service. That rubber band filled my mind. I was fully present with it. It was like the whole world was just me and that rubber band.

And then—well, you know. My mind wandered. Where did rubber bands come from? Who invented them?

First of all, there is the rubber. According to several internet sources, it has recently been discovered that Mesoamerican peoples like the Aztecs and Mayans were making rubber three thousand years ago (although they didn't call it that). They took a milky-white sap known as latex from the

indigenous trees and mixed it with juices from morning glory vines. The result was an ancient version of rubber that was used for a variety of purposes, like sandals, balls, and jewelry.

When Spanish explorers arrived in South America in the 16th century, they discovered this elastic, malleable sap. The name "rubber" was given to the latex material in 1770 when the famous British chemist Joseph Priestley (who also discovered oxygen) noted that the material rubbed pencil marks right off a piece of paper. So that's how erasers were invented. It's also how the latex material came to be called the "rubbing material." Since the end of the 18th century, the material has simply been known as "rubber."

According to Wikipedia, the rubber band was patented in England in 1845 by Stephen Perry. Rubber bands are also known as elastic bands, gum bands, or lacky bands. They are usually manufactured out of natural rubber. They are made by extruding the rubber into a long tube, after which they are cured with heat and then sliced. They have three dimensions: Length, width, and thickness. As a result, they are sold in a lot of different lengths, widths, and thicknesses.

So there I was, contemplating that rubber band, and my mind was filled with Mayans, Aztecs, Spanish explorers, Joseph Priestly, and erasers. All of that deep background dramatically increased my appreciation of rubber bands. I will never look at a rubber band the same way again. (And neither should you.)

I am sure that mindfulness is a good thing. I recommend it. And I have another recommendation. If you are like me and you can't stay mindful for long, I recommend that you go ahead and let your mind wander. When my mind wandered and I started asking questions, my daily life was enriched in a simple way.

So let's be mindful. But if we can't be mindful, let's be curious!

My Missing Body Parts

I don't know much about the human body, which is awkward, since I have one, and I have been living in it all my life.

But wait! That's not exactly true. I haven't been living in ***this*** body all my life. Scientists tell us that the body replaces itself with a largely new set of cells every seven to 10 years. The rate of replacement varies depending on the type of cell. Cells in the stomach and intestines usually last only five days, skin cells get replaced every two to four weeks, red blood cells live about four months, liver cells renew themselves every 150 to 500 days, and hair cells can last as long as three years for men and six years for women. Brain cells, fortunately, can last a lifetime.

This means that most of me has been replaced somewhere between 7 and 10 times so far during my lifetime. So, if you don't mind, I am not "the same old Kent." I am not the person I used to be. I am mostly a ***new*** Kent. But then, you're not the person you used to be, either. And by the time you finish reading this essay, you will technically be a ***new*** you.

How awesome is that? And we haven't even gotten to the renewal of our minds and spirits. We're just talking about cells.

As long as we're talking about cells (and I admit, we just started, so it hasn't been very long), I want to make it clear that I see the human body as a miracle from the very beginning. I cannot grasp how cells— an egg and a sperm cell— can come together and grow into complex human beings (yes, you're right— some more complex than others). Our bodies are totally amazing.

From a purely physical perspective, the body is composed of elements like hydrogen, oxygen, carbon, calcium, and phosphorus residing in trillions of cells and even non-cellular parts of the body. It is estimated that an adult male body is about 60% water, including blood plasma and fluid inside cells. This may be why so many people walk around with bottles of water. Maybe if we don't drink enough, we will just shrink like a fizzled balloon. (Okay, maybe not, but there are reasons we were taught to drink

eight 8-ounce glasses of water per day. Who wants to be only 55% water?)

In the interest of full disclosure, I need to inform you that two of my body parts are missing. I didn't forget where I put them— they were removed surgically. Specifically, I no longer have tonsils or an appendix. While I am no longer a "whole person," I am still functioning more or less as a normal human (sometimes more, sometimes less). It is pretty amazing that some organs can be removed and we can just go on living. It's no big deal.

Or is it? (If this were a TV documentary, some unsettling music would well up about now, creating a vague sense of discomfort.)

The answer is that not having my tonsils and appendix is not a big deal. However, ***removing*** them had a big impact on me. Specifically, I grew taller, and I didn't die.

First, the tonsils. They are found in the back of one's throat, and officially, they consist of oval-shaped pads of tissue, one tonsil on each side. Unofficially, they are little things on each side of that other little thing hanging in the middle of the back of one's throat.

Tonsils play an important role in the immune system, as the first line of defense against foreign pathogens (i.e., bad stuff) that is ingested or inhaled. Tonsilitis occurs when the tonsils become inflamed. This happens most often when the tonsils are infected with a common virus, but they can also be infected with bacteria.

The most common bacteria causing tonsilitis are the bacteria that cause strep throat. It is most common in children aged 5 to 15. That is partly because school-age children are exposed to lots of viruses and bacteria at school. Also, the immune function of tonsils is said to decline after puberty, which is probably why so few adults get tonsilitis.

According to an article by Sarah Kliff in ***The Washington Post*** that was published in 2012:

> It turns out we're in the middle of an epidemic — a tonsillectomy epidemic, to be more specific. Tonsillectomies are the most common procedure, for children, requiring anesthesia. And we're doing more of them: The number of tonsillectomies performed spiked by 74

> percent between 1996 and 2006. In 2006 alone, more than a half-million children in the United States got their tonsils removed. The only problem is there's no evidence they work for most children.
>
> The procedure does show some benefits for those with really serious symptoms — very sore throats, fevers and other symptoms at least seven times in the past year — but no improvement for those whose indications are milder.

You probably can't wait to hear why my tonsils were removed, and whether there were any benefits. Well, when I was 13, I was sick pretty often with strep throat. My mother looked into my throat and saw some weird hard white stuff back there around my tonsils. She knew that couldn't be good. She took me to one doctor after another, telling them that my tonsils were bad and they were stunting my growth. One after the other, the doctors said, "Now, now, ma'am, he's fine, he's fine."

Mom wouldn't give up. (She never did.) Finally, a doctor routinely asked me to open my mouth as he prepared to examine me. He was still three feet away, but he could smell my awful, disease-ridden tonsils. Mom had been right all along. That was no surprise. She usually was. (There are other stories in which Mom knew more than the doctors. Let's just say she should have been given an honorary medical degree.)

So I went and got my tonsils removed. For a couple of days, I got to eat ice cream as the pain subsided and I healed. That was cool. Then in the next 18 months, ***I grew 8 inches.*** I just shot up. Whooosh! Nearly half an inch per month. We had to keep buying new clothes. I had trouble walking upstairs and chewing gum at the same time. Seriously. It's hard to be coordinated when your body is growing that fast.

It is possible that it was just my time to grow. That happens to teenagers— they get growth spurts. It is also possible that, just like Mom said, those rotten tonsils were stunting my growth. (I'm going with Mom's analysis.)

That was my first body part to be removed. Later, I had my appendix removed. The appendix is described as a finger-like, blind-ended tube, located somewhere down there around the colon, where the small and large intestines come together. Researchers think that the appendix may serve as a reservoir for beneficial gut bacteria, which makes it pretty

important. When it becomes inflamed, it can rupture, which can be followed by shock, and if untreated, can result in death. It may be a small organ down there where the sun don't shine, but we need to show it some respect. It can kill you.

My appendix was removed a few hours after I passed the road test for my driver's license when I was a senior in high school. This is how it happened. My father was in the Marine Corps, and he was transferred to the Naval War College in Rhode Island after my junior year. I wanted to finish my senior year in Honolulu, so they let me stay with friends of the family. I will call them the Smith family.

I passed the road test, but I felt sick, so I went home to my room in the Smith family house. I felt this bar of fire across my abdomen. It was really painful. I told Mrs. Smith, who gave me a lecture about pain. "Men have no idea about pain," she said. "Men don't give birth. They don't know what pain is." Basically, all men are wimps, and that included me, so I should just be quiet and tough it out.

I did my best to tough it out, but it kept getting worse. Finally, her face filled with disdain, Mrs. Smith agreed to take my wimpy self to the hospital. When we got there, they operated on me immediately. "Good thing we caught it just before it ruptured," the doctor said. Mrs. Smith did not apologize, but she was pretty quiet after that. I think she figured out that I might have died. That occurred to me, too.

There is one more thing I want to share. It's not about losing something, it's about ***adding*** something. Specifically, ear wax. At least once a year, I go to my doctor, who uses a syringe to pump water into my ears at high speed in order to dislodge and remove the excess wax without damaging my ear drum.

I understand that ear wax has both anti-fungal and anti-bacterial properties. It also protects ears from dust, hair, or even small insects (not a pretty thought). I don't want to be ungrateful, but why do I produce ***more*** ear wax than I need? What's the point? My ears produce more and more wax, protecting my ears better and better, until I can't hear. Doesn't that defeat the reason for having ears?

I wonder how this super-waxing condition survived generation after generation. Think of early humans. If the men were out hunting and they

started shouting, "the tigers are coming!" my ancestors wouldn't have heard them. They would not have fled. They would have become dinner for the tigers. How did they survive generation after generation?

Oh… wait. What if the men were out hunting and they started shouting, "the women are coming!" My ancestors wouldn't have heard that, either. They would have ended up married with kids, some of whom would have been super-waxers, which would have passed the trait on to more generations, right down to people like me. Now I get it.

What? Did you say something?

Wind and Wings

"Wind Beneath My Wings" is a beautiful song about people who lift others up. The song says: "I can fly higher than an eagle, for you are the wind beneath my wings." The music rises, ending with these words: "Thank you, thank you, thank God for you, the wind beneath my wings."

We should all be grateful to those who have helpred us soar. I am grateful to those who have helped ***me***. (Thinking especially of my wife, here.) We can really make a difference in the lives of others by helping them soar as well.

Thinking about lifting and being lifted makes me feel happy and peaceful, and that is good. I encourage you to do the same. That should make you feel happy and peaceful, too.

Lifting is good. Soaring is good. Happy and peaceful is good. We should just leave it at that.

But…well…

I have some questions. I hate to spoil the mood, but I wonder: What does it mean, ***exactly***, to be the wind beneath somebody's wings? I know it's a metaphor, but it's a metaphor that is specifically about flying and it mentions an eagle. So what does it mean to be the wind beneath a bird's wings?

Remember, this is about the wind ***lifting*** a bird. It's not about a bird flapping his or her wings enthusiastically in order to fly up, down, or forward. This is about the wind ***lifting*** a bird. It's like, you know, the bird doesn't have to ***do*** anything except be lifted. So when does the wind ***lift*** a bird?

The answer is not exactly the wind. The answer is ***thermals***. Thermals are updrafts of warm air that rise from the ground into the sky. According to our friends at aerospaceweb.org:

Thermals form as a result of uneven heating of the air near the ground that is often due to difference in terrain or the presence of buildings. Thermals are particularly common near hills, for example, since the sun heats one side of the hill while the other is shadowed. As the sunny side of the terrain absorbs the sun's heat, the air above it is warmed while the air above the shadowed terrain remains cooler. Buildings are also good at absorbing heat and can create similar effects. These differences in temperature create convective currents that cause the air to begin circulating.

So birds can ride these columns of rising air, often flying in a spiraling, circular path that takes them to higher altitudes while expending very little energy. It's not the wind, exactly, but it's rising air, and it's still a really nice metaphor. So nice, in fact, that sail planes and gliders make use of it, climbing hundreds of meters without using any energy. So now you know: when you are the wind beneath somebody's wings, you are a thermal, warm and uplifting. It's all good.

(No, no—being a thermal doesn't imply that you are full of hot air. But I probably wouldn't say to somebody: "Hi, I'd be happy to help you. Let me be your ***thermal***." They won't understand, and you won't have time to explain, because they will be running for the door.)

This whole idea about the wind or thermals being beneath somebody's wings is good. Except when you get on an airplane. Seriously. When you get on a plane, you don't want the wind beneath your wings. The plane won't stay up in the air. You need the wind ***above*** as well as beneath your wings.

When you think about it, airplanes are amazing. Basically, when you ride a plane, you get into a long tin can with wings that roars up into the sky, stays up in the sky for long distances, and then safely descends back to Earth. How does it stay up in the sky so long?

As you suspected, the answer is found in the movie ***Fly Away Home***, a 1996 family movie starring Anna Paquin and Jeff Daniels. The movie is based on the story of Bill Lishman who in 1986 trained Canadian geese to follow his ultralight (meaning: very small) aircraft so he could lead them on their migration south.

In the movie, 13-year-old Amy Alden is brought to Ontario from New

Zealand after her mother dies in a car accident there. She goes to live with her estranged father, Thomas Alden, who is a sculptor and inventor. After Amy arrives, a construction crew destroys a wilderness area near the Alden home, and Amy finds a nest of 16 goose eggs. She incubates the eggs, and when the goslings hatch, they imprint on Amy. They think Amy is their mother, so they follow her around.

Of course, without their mother, the geese have no one to guide them on their migration south for the winter. That is, no one except Amy. The birds will follow Amy, so she is going to have to lead them south to a bird sanctuary in North Carolina. With the help of his brother, David, his girl-friend, Susan, and others, Thomas builds two ultralight (still meaning: very small) aircraft, one for Amy and one for himself, so they can make the trip.

It is during the process of inventing the aircraft that we learn about the Bernoulli principle. Here is the word-for-word transcription of this teach-able moment.

Scene: Thomas and David are in the workshop. Thomas is at his drawing board, slowly twirling a single feather around in his hand, pondering, while David is at a table, very solemnly working on a computer.

Thomas: How fast do they fly again?
David: Uh, thirty-one miles an hour.
Thomas: Oh, God, there's no way.
David: Yeah, it's slow.
Thomas: That makes for a really slow airplane.
David: But you know they're aerodynamically almost perfect.
Thomas: What's that principle…what's the name of the guy that…
David: Bernoulli.
Thomas: Bernoulli, yeah.
David: If it's a wing, the curve, the airflow moves faster over the top because it has further to go, less pressure on top, ergo lift, ergo flight.

That's a very succinct explanation, perfect for a family movie. And it is an interesting, heart-warming family movie for many other reasons beyond the Bernoulli principle. You need to watch this movie as soon as possible.

For some of you, however, this succinct family-movie explanation is not enough. You are on a deeper, or at least a more detailed, quest to understand the universe, or at least this particular very airy part of it. Not

to worry! For you, there is a more complete, not to mention more wordy, explanation of the Bernoulli principle.

For that more detailed prose explanation (***sans*** diagrams and formulas) we turn to an educational publication of the National Aeronautics and Space Administration. NASA points out that there are four forces that act upon an aircraft: lift, gravity, drag, and thrust. Lift is what keeps objects in the air. NASA says:

> …Because of the shape of an airplane's wing, called an airfoil, the air into which the airplane flies is split at the wing's leading edge, passing above and below the wing at different speeds so that the air will reach the same endpoint along the trailing edge of the wing at the same time. In general, the wing's upper surface is curved so that the air rushing over the top of the wing speeds up and stretches out, which decreases the air pressure above the wing. In contrast, the air flowing below the wing moves in a straighter line, thus its speed and pressure remain about the same. Since high pressure always moves toward low pressure, the air below the wing pushes upward toward the air above the wing. The wing, in the middle, is then "lifted" by the force of the air perpendicular to the wing.
>
> [Note: This would be a good paragraph to memorize and use any time that you want to bring a conversation to a cold stop, such as when you are on an airplane and you want to sleep or read a book and the person next to you won't stop talking. Enthusiastically reciting this paragraph could do the trick.]

So now you know that when you fly in an airplane, it is not enough to have the wind beneath your wings, you also need the wind ***above*** your wings. We are doing really well with all this learning. But it doesn't explain the bird on our front lawn.

Every winter, we have a visitor, a Pacific Golden Plover (known as ***kolea*** in Hawaii). We look out our window one day and there he is, standing serenely in our front yard. The thing is this: He comes all the way from Alaska. With only a 17-inch wingspan, he flies about 3,000 miles, nonstop, in three to four days, and finds a small land mass known as Hawaii in the middle of the vast blue Pacific Ocean. Then he finds the speck of land that constitutes our front yard.

He does this every year. He doesn't go through immigration or animal quarantine. He never asks permission. On the other hand, he issues no demands. He just shows up, makes little noise, causes no trouble, and then, after a few months, he flies back to Alaska. And he does this ***without*** Jeff Daniels, Anna Paquin, or an ultralight (still meaning: very small) aircraft to lead him.

According to the U.S. Fish & Wildlife Service, the Pacific Golden Plover is a phenomenal long-distance traveler. Plovers breed in the Arctic, then migrate half way around the world, flying thousands of miles to winter in places like Hawaii, Fiji, the South Pacific Islands, and even New Zealand. They return to the same place for winter each year. Scientists in Hawaii have been able to attach lightweight electronic tracking devices to the birds who come to Hawaii, so they can track their migrations.

Okay, that's what they do. But how? They reportedly cannot swim, soar, or glide. They weigh only 4.6 ounces, which is little more than a quarter of one pound. If they fall below that weight, they will not have enough energy to keep flying. Of course, they ***do*** lose weight as they fly, flapping their wings as many as 250,000 times during the trip in order to maintain a constant optimal speed of 32 miles per hour. But there are no places to stop for a snack along the way and recover the lost weight. And then they find Hawaii in the middle of the ocean, even though their trip has included flying through absolute darkness during three nights and has also probably included flying through disorienting rain. So again, ***how***?

According to an ardent admirer of plovers at ***The Fountain*** magazine, there are three keys: (1) carbo-loading, (2) friends, and (3) magnetic fields. First, before they take wing, plovers eat a lot— they increase their body weight by more than half. Second, they fly with other plovers, in a V formation, so that the birds in the front generate airflow that helps the birds in the rear to fly using less energy (they rotate the lead positions out of an egalitarian sense of fairness). And third, in addition to using the sun to navigate, they are able to follow magnetic field lines of the Earth at a certain angle, adjusting as they go, to stay on course. The ardent admirer at ***The Fountain*** says that "some scientists believe that the magnetic field map of the world is recorded in the eyes of migratory birds." I don't know if that is true, but I hope it is, because it is so totally cool.

Plovers do better than some airplanes I have flown. For example, years ago I was on a commercial flight to a small city in North Dakota, and the

plane flew past the airport. "We missed the airport," the pilot announced. "We'll go back and see if we can find it."

I don't mean to brag, but that has never happened to our Pacific Golden Plover.

Your Remote, My Remote

We woke up in the middle of the night when the light that is attached to the ceiling fan in our bedroom suddenly turned on.

It was startling. Flash! Suddenly the room was lit. I sat up, trying to clear my head, thinking: WHAAAAAAT? I looked around, and there were no robbers, which made sense, because a robber wouldn't turn the light ***on***. I also quickly noted that there were no family members entering the room to explain an emergency, no researchers rushing into the room to study the effects of sleep deprivation, and no devices like Alexa that might have gone rogue like Hal in the movie *2001*. So how did the light go on? As the fog in my head lifted and I began to think in a clear, well-reasoned manner, I thought: WHAAAAAAT?

Then I remembered. Oh. Right. It wasn't the first time we had been zapped by somebody else's remote.

Yes, indeed, we had previous experience. It started when we lived in a townhome in a new neighborhood in Kapolei. One evening, when Elizabeth was driving home from work, she approached our unit, hit the remote for our garage door, and our neighbor's garage door went up instead. He was there, and he was surprised. It seemed that we both had remotes that used the same frequency for our garage doors. (We are pretty sure he subsequently changed the frequency on his remote, because the Garage Door Incident didn't happen again.)

The townhomes in Kapolei were brand new, delivered to each of us homeowners without ceiling lights or fans. So we did what any normal American would do— we went to the nearest Home Depot and bought ceiling fans that have a built-in light. The fan and light are operated with a remote control that can turn on the fan, or the light, or both. No dangling chains that have to be pulled to turn the fan or light on and off. It was a major technological step forward. We could manipulate our world without getting off our couch or getting out of bed.

We had one of those ceiling fans in our living room in Kapolei. In the

evening, we would turn on both the fan and the light and blissfully watch TV. Occasionally, either the light or the fan would turn off without us doing anything other than sitting there blissfully. We would have to put our blissfulness on temporary hold while we used the remote to turn the fan and light back on again.

We asked one of the maintenance men about it, and he suggested that lots of people in our neighborhood probably did what any normal American would do and purchased their ceiling fans from the nearby Home Depot. That meant that we all had remotes with the same pre-assigned frequencies. He said that he thought the remotes could affect fans that were as far as 100 feet away, which of course included a couple dozen townhomes all around us. There was no way of knowing whose remote was operating our fan.

According to our friends at InfoBloom.com, there are generally two major types of remote controls: infrared and radio frequency. Most home entertainment components such as stereos, televisions and home entertainment centers use infrared remote controls. Radio frequency remote controls are used most often for garage door openers, alarm systems, key fobs and radio-controlled toys. They explain:

> Infrared remote controls work by sending pulses of infrared light to a device, while radio frequency remote controls use radio waves in much the same way. Pragmatically, the biggest difference between the two is range. Infrared remote controls require a clear line of sight to the receiving device and their range maxes out at about 30 feet… Radio frequency remote controls can go through walls and around corners, with a range of roughly 100 feet…

That part about going through walls and around corners with a range of 100 feet sounds like our ceiling fan remotes.

The maintenance man revealed that we could change the frequency on our remote. The manufacturer had very thoughtfully given us several choices of frequencies. I was willing to learn how to change frequencies, but then it occurred to me that those who already knew how to do it had undoubtedly used their knowledge to change to one of the other pre-set frequencies that were available. That meant that if I changed to one of those other frequencies as well, I would be joining another group of people with remotes that could change my ceiling fan or light. There was no

way to tell which frequency had the fewest users, who those fine people might be, and how far away they might live.

Of course, there was a partial solution. The fan was connected to the light switch on the wall. When we turned on the light switch, that made electricity available to the fan, which we could then turn on and off using the remote. To prevent the light going on during the night due to somebody else's remote, we could turn off the wall switch when we went to bed. Simple: no electricity, no light, no problem.

[*Slightly related side story*: This idea of turning off the wall switch reminded me of an experience I had about fifty years ago. I was driving in the mountains. The road had lots of hairpin turns. Suddenly, my gasoline pedal stopped responding. I found out later that the needle valve that controlled the amount of gas being fed into the engine had stuck. Most significantly, it had stuck at a level that kept my car going 55 miles per hour.

I didn't know what to do. I pumped the brake to temporarily bring down my speed, but I knew that I could burn out the brakes if I kept doing that. I said to myself: *"I went to college, I'm an educated man, I should know how to handle this, but I don't know what to do, so I am about to crash and die!"* It was a long time ago, so those may not have been my exact thoughts, but I clearly remember the "crash and die" part. It was scary. I kept struggling to control my car as it raced around the hairpin turns.

Finally, it occurred to me. *TURN OFF THE ENGINE!* Just turn it off. Gravity would keep me rolling down the hill. It was simple. It was also humbling, because obviously I wasn't as educated as I thought. Still, I finally figured it out, and I lived to drive another day. Whew! That was close!]

But back to remotes. After a couple of years in Kapolei, we moved back to our old home in Manoa, and decided to replace and update our ceiling fans with—you guessed it— ceiling fans with lights that are operated by remotes instead of by pulling chains. Yes, I know, we should have learned. But we were moving back to an old neighborhood whose residents had most assuredly ***not*** all gone to Home Depot to get the same kind of ceiling fan with the same remote frequencies.

Except now we were pretty sure that somebody ***did***. Our ceiling light in our bedroom in Manoa had, indeed, gone on in the middle of the night. We had witnesses: Us.

Turning off the wall switch that night was not a solution. That's because we wanted to use the fan and not the light. It was warm that night, about 80 degrees, so we clicked on the fan but clicked off the light. We had to keep the wall switch ***on*** to keep the fan on, so we were still vulnerable to the rogue remotes of our neighbors. We had to hope that our neighbors would just sleep all night and forego their disturbing remote activity. Somebody didn't.

So now we understand that rogue remotes are just part of daily life in a community. Occasionally our ceiling fan or light will go on or off when we don't want it to. Your remote, my remote: we all have to live together. ***C'est la vie***.

Fortunately, it appears that these radio waves are not harmful. The folks at CrunchReviews.com point out that ionizing waves like x-rays and gamma-rays have the potential to cause severe damage. Too much of these rays may cause sickness, burns, or cancer. However, ***non***-ionizing electromagnetic waves like the ones in our remote controls don't carry enough energy in their photons to ionize or break our atoms and cells.

The fact is that we are all used to living with a lot more radio waves than our remotes can generate. That's because the biggest source of radio waves is the Sun. It generates a wide range of radio waves. In fact, it emits radiation that covers the electromagnetic spectrum from X-rays to ultra-long-wavelength radio waves. It has been doing this literally forever. That makes it possible to have life here on Earth. We have to be careful not to get overexposed, but otherwise, no worries. In the immortal words of The Beatles:

Here comes the sun, doo da doo doo,
Here comes the sun, and I say,
It's all right.

Squirrels, Mozart, and Cat Stevens

We hope that all the students at all our colleges and universities are learning a lot. That's pretty much the point of having nearly twenty million people walking around on thousands of campuses. The students pass a lot of tests, so we know they are learning ***something***.

We might think that while they are learning something, their brains are getting bigger. Well, their brains might be getting bigger if we are thinking of neurons and synapses— they might be developing more of them. But human brains reach 100% of their adult size when they are between seven and eleven years old, so we're not holding out much hope for physical brain growth among college students.

We have to look elsewhere. And when we do, we find something amazing. It turns out there are, in fact, some brains on campus that actually get ***physically*** bigger, and they aren't human brains. They are squirrel brains. And the squirrels aren't even attending classes.

I learned this from a ***Nature*** program shown on PBS titled "A squirrel's guide to success." The program revealed that there are approximately 300 species of squirrels. Different species have different superpowers. For example, some squirrels can glide through the air (they mostly glide ***down***), some can outwit rattlesnakes by inflating and shaking their tails (making themselves look bigger), and some can survive the coldest temperatures of any mammal (their body temperatures drop below zero degrees). Then there is the brainy Fox squirrel who can remember the location of 9,000 nuts.

Andrew Carnegie may have said, "put all your eggs in one basket, and then watch the basket." Some squirrels are not taking his advice regarding their nuts. If a squirrel puts all of his or her nuts in one place and another squirrel discovers that one place, the squirrel will lose all of his or her nuts for the winter. So squirrels hide their nuts in a lot of different places. This is known as "scatter hoarding."

So far, so good. Here comes the problem. Squirrels may hide hundreds

of nuts in hundreds of different places. Then, months later, they go looking for them. How many are they able to find?

To learn the answer to this question, Dr. Mikel Delgado of the University of California at Berkeley did a study. Berkeley happens to be the home of a lot of free-range, non-tuition squirrels. (In the interest of full disclosure, Berkeley is also where my sister worked for thirty-nine years, and where my father earned his Ph.D. However, so far as I know, neither my sister nor my father was intimately involved in the Berkeley squirrel community, so I don't think I have a personal bias that I need to declare, here.)

Dr. Delgado painted a lot of nuts a yellowish green color and embedded tiny microchips in them. Then, when the squirrels picked up the nuts to hide them for the winter, she tracked where all those nuts went. She even made a color-coded map of all the locations.

What was the result? Months later, the Fox squirrels were able to remember and locate about 90 percent of the nuts they buried. Awesome!

It takes a good deal of brain power to remember all those nutty locations. How do squirrels do it? The answer is simple: they grow larger brains. Yes, their brains actually get ***physically*** larger. They get larger during the fall when nuts are plentiful and need to be hidden away.

Megan Betcher is a nature enthusiast with a B.S. in both Natural Resource Management and Wildlife Management. She writes a blog, Megan's Nature Nook, which happens to address this amazing squirrel phenomenon. She says that the squirrel's hippocampus, which is the memory and spatial organization area of the brain, increases 15% in size in the fall. But there is more to the story. She says:

> Studies have shown that squirrels will categorize where certain types of nuts are stored. They'll have walnuts in one area and acorns in another which may help them to better remember the hiding spots since they're more organized. After the initial hiding they will continue to interact with their caches, visiting spots where they've been buried, sniffing around, and even digging up and reburying nuts in a new spot. This can help them to better remember where each nut is hidden and build their mental nut map. It is also thought that digging fake holes and digging up and reburying nuts might deceive any onlookers that may try to steal their caches.

I am truly impressed. I never thought I would be jealous of a squirrel, but I am. I wish I could have grown a bigger brain while trying to put away some information for my tests in high school and college. The length of the Amazon river, the dates of the Peloponnesian War, the Periodic Table of Elements, the definition of a socio-metric star, micro-economic theory, Mendelian genetics… it would have been a lot easier with an expanding brain.

Our brains may not get physically larger after age eleven, but we can still activate them in positive ways. For example, takelessons.com offers a list of ten benefits of listening to classical music. The blog cites research indicating that listening to classical music decreases blood pressure, boosts memory, sparks creativity, reduces stress levels, supercharges brainpower, fights depression, puts you to sleep, relieves pain, makes you happy, and improves productivity.

That's a lot of benefits. However, not all classical music has the same impact. For example, if you want to give your brain a boost, your best choice seems to be Mozart.

Researchers from Sapienza University of Rome conducted a study on 30 adults of different ages. Recordings of brain activity were made before and after the group listened to *L'allegro con spirito* from the *Sonata for Two Pianos in D Major K448* by Mozart, and before and after they listened to *Fur Elise* by Beethoven.

People who heard Mozart's music showed an increase in brain wave activity linked to memory, understanding, and problem-solving. However (and very regrettably), no such increases were found after the group listened to Beethoven.

The researchers concluded that there is something specific about the effect of Mozart's music on our minds. They said that Mozart's music is able to "activate" circuits of nerve cells in the brain related to attentive and cognitive functions— something that doesn't happen when listening to just ***any*** kind of music.

The researchers suggested that the rational and highly organized arrangement of Mozart's sonata may echo the organization of the cerebral cortex— the part of the brain responsible for high-level mental functions.

They added that one of the distinctive features of Mozart's music is the frequent repetition of the melodic line, which means that there is a lack of "surprise" elements that may distract the listener's attention from rational listening.

Not to be outdone by the Italians, university researchers in France published an article in ***Learning and Individual Differences*** regarding the positive impact of classical music. They found that students who listened to a one-hour lecture during which classical music was played in the background scored significantly higher on a quiz on the lecture when compared to a similar group of students who heard the lecture with no music.

The researchers speculated that the music put the students in a heightened emotional state, making them more receptive to information. They said: "It is possible that music, provoking a change in the learning environment, influenced the students' motivation to remain focused during the lecture, which led to better performance on the multiple-choice quiz."

The idea that music can improve a person's performance reminded me that listening to music can have an impact on other mammals as well. Specifically, cows. A long time ago I heard that researchers had discovered that cows produced more milk when listening to the music of Cat Stevens (as Yusuf was known then). Apparently, his music put them in a good mood (mooooood?) and that made them more productive.

I am intrigued. Who thought of conducting this research regarding the impact of music on cows? Seriously— whose idea was it? And why did they actually ***do*** it? Were the cows tired of Muzak? Did they make a formal request? Did the Italian and French researchers run out of students to test, and decide that cows were the natural next step? Was the researcher a fan of Cat Stevens who wanted to build his fan base among cows? Was the music really for the dairy workers, and they discovered accidentally that it stimulated the cows?

Of course, I have lots of other questions. I don't know whether the research methodology was suitably rigorous. Was there a control group consisting of cows who listened to nothing at all? Did the test group of cows listen to other singers as well? If so, which ones were selected, and why? If I recall, the research was conducted back in the 1980s, and there were a lot of popular singers in those years. How about Whitney Houston, Billy Joel, Michael Jackson, Madonna, Stevie Wonder, Lionel Richie, Bruce

Springsteen, Phil Collins, or Elton John? And which Cat Stevens music did they play for the cows? For example, did they play Wild World, Moon Shadow, Peace Train, or Morning Has Broken? Finally, at the time of the research, did Cat Stevens drink milk, and was he happy with the results of the cow research? This obviously calls for more research. There are just too many questions, and the world wants answers.

In the meantime, the good news is that we can stimulate our brains in some positive ways. Come to think of it, reading this essay may have stimulated your brain. If so, you may have strengthened some neural connections. That's always a good thing. But I am sorry to say that your brain probably did not grow physically. The reason is simple.

You are not a squirrel.

About the Author

Dr. Kent M. Keith is usually a serious person who writes very serious things about the meaning of life, the Paradoxical Commandments, and the importance of servant leadership. This seriousness is not surprising. He went to Harvard University, Oxford University, Waseda University, the University of Hawaii, and the University of Southern California where he met a lot of very serious people while earning a Bachelor's degree, a Master's degree, a Certificate in Japanese, a law degree, and a doctorate. He also had a lot of very serious jobs like attorney, state government official, high tech park developer, YMCA executive, president of two universities, and CEO of two nonprofit organizations.

But then he retired in 2020, and his Inner Whimsy could no longer be controlled. There were early indications of this Inner Whimsy, such as the silly skits that he wrote in the fifth grade and the humor that trickled out during his thousand-plus speaking engagements and workshops in thirteen countries around the world. But now, unrestrained by a day job and not sufficiently talented to play golf or tennis or grow vegetables, his Inner Whimsy, which used to be a mere trickle, has become a major leak. There is concern that it may become a river. When it comes to Inner Whimsy, it is hard to say.

Dr. Keith is married to Dr. Elizabeth Misao Keith, who fortunately has a great sense of humor. They have three grown children who also laugh a lot. The Drs. Keith live in Honolulu, a beautiful place that is culturally diverse and does not discriminate against whimsy.

Information about Dr. Keith can be found on websites like www.kentmkeith.com and www.carlsonkeith.com. You can contact Dr. Keith at drkentkeith@hotmail.com. Or not. It's up to you. Seriously.