Pay attention

Once I spent an afternoon with a friend, dare I say lover, sitting on a rock at the seashore. The tide was coming in, and we were sitting there long enough to watch the water gain the shore one pebble at a time, until it was covering our feet. It broke in little rivulets around the stones, moved quickly to fill in hollows, and floated the sprigs of rockweed. Clams sensed its approach and gave their little squirts from under the sand, and hermit crabs scuttled along discovering new territory. It was a magical time, and I remember marveling at how gentle the motion was but what a huge force is the tide.

We live on a tidal river in Maine. There is a freshwater source about five miles up from us, but for the twelve miles between the Gulf of Maine and our village, it's fully tidal with the water level rising and falling between ten and twelve feet twice each day, depending on the cycle of the moon. For most of its length, the river is between a half-mile and oneand-a-half miles wide, but about three miles from the Gulf of Maine, there's a spot where the entire tidal flood passes through a passage that's just a few hundred feet wide. Tens of thousands of tons of water race through the narrows every minute—it's a dramatic demonstration of the power of the tide as eight or nine square miles of ten-foot-deep water race by. And the amazing thing is that the flow reverses with each tide cycle. When the ocean drops below that of the river confined above the narrows, the water flows toward the sea until the levels equalize, the current slows, stops, and reverses.

There's a fascinating and huge example of tidal flow through a narrow passage at the western end of the Mediterranean Sea—the Strait of Gibraltar. The Strait is not wide enough to allow the entire Mediterranean to pass through with each tide, so at the eastern end the Adriatic, Ionian, and Aegean Seas around Albania, Greece, and Turkey have no perceptible tides. It's a little unnerving for someone from New England to see a ship on salt water tied up to a fixed cement pier. At home where the tide can be as much as twelve feet, every boat has to be tied to a floating dock.

The grateful church

As much as I love the ocean, it's pretty rare for me to sit still on a rock for an entire tide, and it makes me wonder about the people who first noticed, and then bothered to understand the phenomenon. Think of the patience it took to sit there watching night after day after night. Mr. Tide would have had to make the connection between the motion of the water and the passage of the moon

across the sky, so the realization that the moon orbits around the earth was part of the project. The fact that tides can be accurately predicted years ahead is the result of millions of hours of observation.

Then think of the people who deduced by looking at the stars that the earth is simultaneously and continually orbiting the sun and spinning on its own axis. People like Copernicus and Galileo must have been very stubborn men to have had the patience to sit gazing at the sky for years.

Ón September 9, 1998, Hal Hellman published an article in the *Washington Post* that opened:

On June 22, 1633, Galileo Galilei was put on trial at Inquisition Headquarters in Rome. All of the magnificent powers of the Roman Catholic Church seemed arrayed against the famous scientist. Under the threat of torture, imprisonment, and even burning at the stake, he was forced, on his knees, 'to abjure, curse, and detest' a lifetime of brilliant thought and labor.

In the fall of 1980, Pope John Paul II ordered that the evidence against Galileo be reconsidered, and he was acquitted in 1992.

Just keep writing

Mozart lived for about thirty-five years and wrote well over 600 pieces of music. Schubert wrote about 800 pieces and lived less than thirty-two years. If we assume that each had twenty-five productive years as a composer, they each would have about 219,000 total hours to work with (25 x 365 x 24). Some of that time was spent sleeping and eating, some was spent on the logistics of daily life. How much of their total time on earth did those guys spend putting ink on paper? How long would it take you to simply copy the score of *Don Giovanni*, let alone write it for the first time?

The art of Aristide

Aristide Cavaillé-Coll (1811–1899) was one of history's greatest organbuilders. He's on my mind a lot these days because I recently bought a copy of the superb documentary The Genius of Cavaillé-Coll released by Fugue State Films, and I've watched it several times. Buy your copy from the catalogue of the Organ Historical Society. If you have any affinity at all for the music of Franck, Widor, Dupré, Guilmant, Tournemire, Vierne, or any of the composers of French organ music since about 1835, you owe it to yourself to see this film. (See the review by Gene Bedient in the July issue of THE DIAPASON.

The Genius of Cavaillé-Coll tells of his childhood in Montpellier, located on the Mediterranean coast near enough to the Strait of Gibraltar to have tides of around



Cavaillé-Coll organ at Église Saint-Sulpice, Paris, France

one-and-a-half feet. It tells how Gioachino Rossini was exposed to the work of the young Cavaillé-Coll and encouraged him to move to Paris. And it documents his extraordinary career—how he won his first major contract when in his twenties, and how his imaginative innovations changed the world and music of the pipe organ profoundly and permanently.

Cavaillé-Coll watched and listened to people playing wind instruments, and noticed that a trumpet player, for example, blew harder into his instrument to reach higher notes. So he divided his windchests, feeding higher wind pressure to higher notes, allowing solo stops like the Harmonic Flute to achieve a soaring quality.

Before Cavaillé-Coll's innovations, changes of registration and dynamics were achieved by changing manuals or physically moving stop knobs. He divided his windchests across the other axis, separating mutations, reeds, and higher-pitched stops from the foundations—sixteen, eight, and four-foot flue stops. He invented the ventil—an air switch operated by the organist's foot—that controlled the flow air to the chest with the reeds and mutations. This allowed the organist to "prepare" combinations of stops that could be added to a registration with a flick of the toe.

As Cavaillé-Coll's organs grew larger and more complex, he incorporated the Barker Lever, an ingenious device that pneumatically magnifies the power and travel of an organ's mechanical key action, reducing dramatically the force needed from the organist to play keys that open valves against high pressures, and with multiple couplers engaged. This allowed the effective size of organs to increase. The film tells the scurrilous story of politics and smear campaigns that finally allowed Cavaillé-Coll the free use of the Barker Lever, which had been developed by a competitor who controlled its use.

Cavaillé-Coll was influenced by the concurrent development of the symphony orchestra. He considered the organ comparable to the symphony, emphasizing the importance of solo voices, the ability to change combinations of sounds instantly, and the entire organ as a single mass of tone, capable of seamless dramatic crescendos through the vast dynamic range. Of course, his organs still had individual manual choruses allowing the long-established "terraced" dynamics of the vast body of organ literature. But his rethinking of the concept and potential of the organ inspired the musicians who played his instruments to create new worlds of expression.

Of more than five hundred organs built by Cavaillé-Coll, his greatest achievement was the tremendous instrument at Saint-Sulpice, completed in 1862, still in regular use and widely considered one of the greatest organs in the world. With



Titulaire Daniel Roth at the console at Saint-Sulpice

five manuals and a hundred stops, it was the largest organ ever built, and although it's more than a hundred-fifty years old, it is still as vital, expressive, powerful, and impressive as it was when it was first played. Louis James Alfred Lefébure-Wély was organist at Saint-Sulpice when the organ was completed, and we learn in the film how Cavaillé-Coll advocated his music, until he became aware of Jacques-Nicolas Lemmens who was the organ teacher at the Royal Brussels Conservatory. Cavaillé-Coll tried to introduce Lemmens to the Paris audience, intending to spare Lefébure-Wély's feelings by presenting him in concert with Lemmens. But the plan backfired, and Cavaillé-Coll and Lefébure-Wély had a

I was interested to learn that Widor studied with Lemmens in Brussels—that would give some insight into Widor's appointment at Saint-Sulpice, replacing Lefébure-Wély. And let's remember that between 1870 and 1971, just two organists served that church—Widor, and Marcel Dupré. I think that single succession of organists and that singular instrument is enough to justify the claim of Cavaillé-Coll's unique importance in the history of the instrument.

Cavaillé-Coll traveled throughout Europe studying other organs. The film recounts his impressions after visiting the great organ by Christian Müller at Haarlem. He built organs throughout France, in Spain and Portugal, the United Kingdom, the Netherlands, Belgium, Venezuela, and Brazil, among other countries. This was at a time when it took days to travel across France, and weeks or months to cross the ocean.

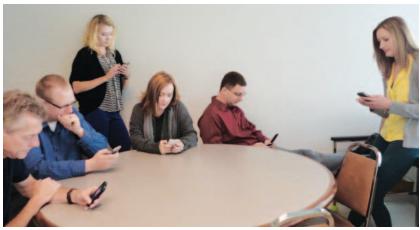
If Aristide Cavaillé-Coll had an iPad and a Facebook page, I bet we wouldn't have had the organ at Saint-Sulpice.

Reviewing a life's work

Some of our contemporary organ companies have impressive opus lists. Taylor & Boody is preparing to build Opus 70, and the Noack Organ Company is working on number 157—a fantastic productive life for a company with a single principal. Cavaillé-Coll's workshop was much larger that any that are active today, but nevertheless, I'm staggered to think through the accomplishments of his life. He must have been thinking all the time. And he must have been on the move constantly. France was early outpaced by neighboring countries in the development of railroads, so for much of his career, Cavaillé-Coll would have relied on horse-drawn vehicles for his travel. Google Maps tells me that it's 748 kilometers (465 miles) from Montpellier to Paris. It would take about seven hours to make that trip in a modern car on modern highways. What an effort it must have been to run between clients scattered across the country in the mid-1800s.

To supervise the sale, design, construction, and installation of more than five hundred organs was a stupendous achievement. To conceive and realize his inventions, from the circular saw





NPATTBD (Not paying attention to the beautiful day)

blade to the Ventil, was a creative output unequaled in the history of the craft. And we know that Cavaillé-Coll spend much energy promoting musicians, encouraging compositions, and planning concerts.

TTFN, GPP

I've learned to refer to a website called netlingo.com when I come across an initialism that I don't understand. When I received this one in a text message, I knew right away that the first one is "ta ta for now." But the second one wasn't on the list, and it took me some time to figure it out. When I realized it was from an organist who must have been sitting on the organ bench during a service, I guessed correctly, "gotta play postlude." Really? Would that be the same organist who complains that churches don't pay organists well enough? Would that be the same organist who feels disrespected by the clergy? Would that be the same organist who is disappointed because his idea of encouraging the church to acquire a new organ hasn't gained traction?

Texting is a great example of how people fail to concentrate. We've only been texting for a few years—and I admit freely that I do all the time, and consider it a terrific way to stay in touch. Imagine the Organ Clearing House crew working in a distant city, picture them high on a tower of scaffolding, and Bishop needs to ask a question. A phone call would be a nuisance. A text message is like putting a sticky-note on someone's refrigerator. I do that even to say, "CWYHAC" (call when you have a chance).

Yesterday was a beautiful day in Manhattan. It was around seventy degrees, breezy and sunny, and thousands (millions?) of people were out and about. But I'm sure most of them were missing the beautiful day, because when I paid careful attention and counted on my fingers while walking a block or two, I noted that well over half the people were "in their phones." They were texting, talking, e-mailing, probably searching for music, but they certainly weren't paying attention to the beautiful day.

Perhaps the most dramatic result of the texting boom is the rapid increase in highway fatalities. It's amazing to me that people think they can take their eyes off the road and their attention from their driving for long enough to write a note.

Initialism is a new word for acronym. It's new enough that my spellchecker doesn't know it. Initialisms in texting are typically short statements like SHWASLOMF (sitting here with a straight look on my face), ROFL (rolling on floor laughing), or the teenager's staple, PWOMS (parent watching over my shoulder). But there's another that is a noun (the initials of a three-word name for a clinical condition) that's started to turn up as an adjective: ADD—as in, "I'm pretty ADD today." WWST (what would Shakespeare think)?

Our daughter Meg and her husband Yorgos have a beautiful dog named Grace. They got her from a shelter in Greece, before moving to the U.S. last fall. She's part Irish Setter and, we think, part Saluki—which is the ancient Egyptian breed that is seen in many hieroglyphs. When they first had her,

they thought they had her trained to stay

off the furniture. But as Meg was studying the art of documentary film making, she got a cool time-lapse camera that sticks to a wall or window with a suction cup. They set it up with a laptop once when they went out, and were amazed and amused to see that in the span of a couple hours, Grace had climbed on and slept on pretty much everything in their apartment. Playing back the film shows a hilarious sequence of her changing her mind. It's indicative of many people I know, who have such short attention spans that I wonder how they ever accomplish anything.

This is why I bring up the work of Galileo, Copernicus, Mozart, Schubert, and Cavaillé-Coll. I wonder what we are losing today because so many people are so wrapped up in the complexity of accomplishing nothing. I know a few people who actually stand out of the crowd because they have powerful and long attention spans. They really can sit on an organ bench for hours, practicing hard, without no powered-up phone sitting there waiting to ring. We're increasingly surprised when someone plays



an organ from memory, but it's simple enough—they've done the serious work that it takes to master the music. They've paid attention.

A friend who is organist of a large and prominent church in Manhattan told me recently that he sits at the grand console in the chancel of his church looking out over a congregation full of people who are buried in their phones. He can see the telltale glow in their eyes.

Are you paying attention?

