

# Analog's twilight: Slowly, digital trumps physical

By TED ANTHONY – 1 day ago

Sometimes, in the decades after he came home from World War II, it seemed as if the movie camera was surgically attached to Christoffel Teeuwissen's hand.

He carried it everywhere, trained it on everything. When they widened the street in front of his house in Florida, there he was. When a septic tank was installed in West Virginia, there he was. High school football games, construction sites, the building of a swimming pool — there he was, camera in hand.

Film ebbed into video, and he kept recording. When the VCR arrived on the scene, history programs joined the collection, as did episodes of "The Lawrence Welk Show" and TV biographies of Glenn Miller.

Then, in 2005, Christoffel Teeuwissen died at 88. And when Jon Teeuwissen and his two sisters began going through their parents' ranch house, another story unfolded.

All over the house, behind each closet door, sat boxes of memories — dozens of 7-inch reels of film, smaller reels of shorter clips, Super 8s, audio recordings, VHS cassettes.

So Christoffel Teeuwissen's children inventoried. They labeled. They assembled the recorded remains of their father's time on Earth into what coherence they could. And then they put everything into boxes and sent it all off to an address in Arizona.

There, courtesy of a company called iMemories Inc., the dusty personal archives of the Teeuwissen family are losing their physicality. Bit by bit, they are becoming DVDs and JPEGs and online videos searchable with a click.

And with that, for Jon Teeuwissen, as for so many people in a new millennium brimming with computerized wonders, the march toward digital remembrances — away from the tactile ones we kept in the 20th century — is under way.

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Things fall apart.

Paper burns. Videotape decays. Negatives rot. Slides fade into seas of midcentury yellow and orange. LPs scratch. Cassettes become too tightly wound. And even if you're a big fan of Foghat, 8-track tapes might as well be images from a 19th-century stereopticon, for all the good they'll do you these days.

The ways we have recorded our personal footprints — on paper and tape and plastic, things we could hold in our hands — are forever stalked by the ticking clock. That slow erosion is even more poignant when you consider that, today, we don't have everything we might have saved. We had to choose which tokens to keep, based on what our wallets and our filing cabinets could accommodate.

The Information Age is changing all that. From the aisles of Best Buy to the pages of the SkyMall catalog, everywhere are gadgets that will transfer the trappings of personal existence into bits of data that are portable, reproducible and potentially infinite.

Sometimes cultural moments arrive stealthily. One of those is at hand. Memories, in all their forms, are shedding their containers and bursting forth into a new phase — and with them, our images of ourselves. This is analog's twilight.

"We get fast food and we get instant information online. Everything is at our fingertips," says Jennafer Martin, editor-in-chief of Digital Scrapbooking magazine. "So it makes a little bit of sense that our memories should be, too."

This is not solely a tale of technology, though it is fueled by staggering progress. It is a story about how we interact with the items that surround us, and what it means when they change. It is about our hope that, through fire or flood or theft, the things we value will be around not only for our lifetimes but for our children's.

Paper, of course, isn't going anywhere just yet. There's too much of it around. But the last decade has fundamentally altered how we capture things and preserve moments in time.

Film cameras are now a niche market, and a digital camera can be bought for \$19.95. Scanmyphotos.com will turn your entire stash of 1980s Fotomat prints into JPEGs. iTunes is so entrenched that we forget we once had to go to the record store. Your

"inbox" now means e-mail, not some wooden container with letters on your desktop (which also means something digital).

Polaroid instant cameras? Buh-bye. Bound books? Google is digitizing more than 3,000 a day. And between 2001 and 2006, sales of blank cassettes dropped by more than 60 percent as flash memory sales spiked, according to the Consumer Electronics Association, which predicts "a slow, steady death for blank audio and video cassettes."

The SkyMall catalog, available in airplane seat pockets, can outfit your entire house with devices to move your vinyl to CD, your CDs to MP3, your videocassettes to DVD and your slides and prints to JPEG.

SkyMall, which targets business travelers and "early adopters," is a showcase for "products that are at the early stage of their life cycle," says Christine Aguilera, SkyMall's CEO. "We have a ton of buyers out there looking for the product that consumers don't know they need yet."

Fujitsu's goal is nothing less than helping us get rid of our paper. Its ScanSnap, a scanner shaped like a printer, can transform the morasses of wood pulp that are out of sync with the encroaching digital world. You can load 50 sheets, push a button and walk away; when you come back, PDF files will be waiting.

It's not new technology. Fujitsu is just framing the device as a "lifestyle product" and pushing the mind-set that physical documents like bills, newspaper clippings and random notes can be unwieldy. Shrewdly, the pitch is gentle: "Go digital — where you want to."

"I don't think you can expect people to make a significant or radical transition in one step. It's got to be done over time," says Scott Francis, marketing director for Fujitsu Computer Products of America. His hard drive contains 6,750 PDF scans, including images of his kid's schoolwork that wouldn't all fit on the refrigerator.

Put this all together and what do you have? Your computer contains the digital equivalent of you. And because this customizable photo album-movie viewer-stereo counts storage "space" as a virtual term — and because access to the contents are instant — our digital memories are way more complete than our physical archives ever were.

In your digital life, packrattery won't crowd you out of your house. Sixteen variants of the same digital photo are fine, because you don't have to print them. Movies downloaded from Amazon don't require shelves crowded with the black plastic of VHS. And if you're scanning documents, you might well catch yourself saving pieces of paper that you might otherwise — perish the thought — throw away.

"If I've got a 120-gigabyte hard drive," Francis says, "I'm going to save that extra rendition of 'Free Bird.'"

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There is something vaguely melancholy about leaving behind the physical past — the physical present, even — and looking to technologies that are less solid, less graspable, less tactile.

The question bubbles under the surface, rarely articulated: What happens to the soul of something when its physicality is removed? Is a yellowed family portrait from 1897 that was held by your father, grandfather and great-grandfather the same thing as a passel of pixels arranged just so?

It's not as if these are the first such changes to the fabric of our lives. Every invention that reconfigured our relationship with information, from the telegraph to the telephone to television to Facebook, was greeted with the suspicion that something of humanity would be lost.

The temerity of recording music so irritated John Philip Sousa that the bandleader denounced its very existence. "Music teaches all that is beautiful in this world," he wrote in 1906. "Let us not hamper it with a machine that tells the story ... without variation, without soul, barren of the joy, the passion."

That suspicion endures. Even technology that was newfangled as recently as the Nixon era now feels traditional. Luke Bryan sings about this in the 2007 tune "Country Man," drawing generational and cultural distinctions as he addresses a girlfriend: "Your little iPod's loaded down with Hoobastank — don't be a tape player hater, girl, we're groovin' to Hank."

"There is a sense of unease," says Edward Tenner, author of "Our Own Devices: How Technology Remakes Humanity." But, he says, "We're always in transition. There's an illusion that there's some stable future that we're moving to. And I think the norm is that we always have this jumble of the old and the new."

The difference is that until a decade ago, the personal wasn't so portable. Sure, you could send your voice across a telephone wire, and sure, you could watch the same episode of "The A-Team" in Savannah or Sacramento, but it's not as if you could call up your entire address book at an Internet cafe in Sri Lanka.

Now, on services like Flickr and Shutterfly, we can share our vacation slides with our friends and the world in real time — without the Campari and the onion dip, the darkened den and carousel projector.

These online outlets are particularly useful given that decay is beginning to claim some of our oldest personal information. Sure, paper can last a century or more if cared for properly, but videotape's shelf life is generally about 15 years and film's about 30. Photo prints from the 1990s are already beginning to fade.

"There's a lot of that content that's at the fourth quarter, two-minute warning," says Mark Rukavina, founder and CEO of iMemories, the Arizona company that ingests entire boxes of American memories, digitizes them and puts them online.

"We see film that's beyond its life span. It's gone. And there's nobody on the planet that can bring it back. ... And we have people in tears," he says. "We are now digitally aware, but you look over your shoulder and you see all the stuff that isn't. And you say, 'How can I get this into digital form?'"

That seems to make eminent sense — particularly if people back up their data, though many don't. Digital, too, has its pitfalls, though: It can decay, albeit in a different way, and it is often locked in a specific format — one that may not exist decades from now. Try opening a MacWrite file these days.

Which brings us to one thing about paper that is simply genius: You never have to plug it in.

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In life, Christoffel Teeuwissen was an acoustic engineer. Among the many cartons his son uncovered were boxes of reel-to-reel tapes filled with the possibility of undiscovered aural treasures. The trouble, says Jon Teeuwissen, was that "I didn't have access to a reel-to-reel tape player. Who does?"

Today all of the memories — "media," we call 'em now — sit in the iMemories building outside Phoenix, gradually becoming digital. When it's done, the Teeuwissen kids will sit down together and dip into their own childhoods and their parents' half-century marriage. It will be an exercise in nostalgia, in all the joyous and longing senses of the word.

"I can remember as a child looking at these movies showing my parents very young at family picnics," Jon Teeuwissen says. He goes silent for a moment. "Now I want to see the 'through-line' — to see them both silver-haired on a fishing boat in Sarasota, Fla. That's the story I want captured."

Since humans began scrawling on caves, we have instinctively captured our stories. Most times, we choose the most important ones to preserve and retell. Now, though, in analog's twilight, we can tell all of them.

We can warehouse tens of thousands of pictures and videos on a single computer, create instant shuffled soundtracks to our lives, turn cluttered ephemera into organized databases. For our descendants, we are starting to leave not just bread crumbs but entire loaves.

Tenner has an omnivore's sensibility about it all. "None of us has an idea of all the things we create, the things we do, what anybody's going to care about in the future," he says. "So we should treat everything we do as though somebody might be interested."

Human beings, though, are not built to be completists. Selectivity matters. Our stories are told as much by winnowing as by adding, and the choices we make about them affect how we see the world. Looking back from adulthood, a single cherished photo of your seventh birthday party, dog-eared and slightly faded, helps shape the prism of distant memory. What kind of a different tale will 300 hi-res JPEGs of the same event tell? We don't know yet.

And so we go forward, turning our stuff into data and our lives into potential stories that can be shared, consumed, reconfigured for tomorrow and tomorrow and tomorrow. No shelf space required. Just ever bigger hard drives for all that we can possibly wish to remember. No matter how important, or unimportant, it might be.

On the Net:

- Dead Media Project: <http://www.deadmedia.org/notes/index-cat.html.pi>
- iMemories: <http://www.imemories.com>