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Unspooled

In the Digital Age, The Quaint Cassette Is Sent Reeling Into History's Dustbin

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In 1923, Fritz Pfleumer, a chemist in Dresden, was coating thin strips of paper with magnetizing chemicals, so that he could attempt to record sound on them. Sixty years after that, a girl said, "Your music depresses me," and handed a boy back the cassette tape he had made for her on the stereo in his bedroom.

Another 20 years drift by: Someone has left a ripped Dean & DeLuca grocery bag filled with some cassette tapes, a broken telephone, three sweaters and two T-shirts on a sidewalk on Connecticut Avenue. The tapes include, but are not limited to, Squeeze, Willie Nelson, something called "Burning '70s Disco Party," and the soundtracks to "Dances With Wolves," "Dick Tracy" and "Flashdance." There are also tapes by Rufus with Chaka Khan, Tracy Chapman, 10,000 Maniacs, Juice Newton, the Beach Boys, U2, Huey Lewis and the News, Nana Mouskouri, and three pink-and-yellow 60-minute TDK brand cassettes -- two unlabeled, and one labeled "Run." There is also a color snapshot in a plexiglass frame, of three women holding what appear to be tropical-flavored alcoholic beverages.

Between Fritz Pfleumer and the present nationwide discarding of cassette tapes, something unspools in the heart, gets tangled up in the weeds that grow along the freeway. Wearing something out by loving it too much -- fast-forwarding, rewinding, flipping, dropping, splicing, erasing. Think of the boys who used to come on to girls (or other boys) the only way they knew how.

Via the tape.

On the first day of the current fall semester at the Berklee College of Music in Boston, a professor named Rob Jaczko (who has worked on albums with Bruce Springsteen, Eurythmics, Don Henley, the Cars and a number of other artists whose chart-topping cassettes have since ossified under the passenger seat of a 1989 Ford Probe somewhere) was going over course requirements with the students in his production and engineering class.

He then noticed something very wrong on the syllabus.

"Everybody take your pencils and draw a line through the word 'cassette' and write in 'CD,' " he told them. "I will no longer be accepting any work on cassette tape."

"This was kind of a major moment," Jaczko says, now that he considers it, "although I'm not sure any of my students would even *think* of using analog cassette now. They all grew up burning CDs. It's the end of analog."

Which means the end of how things once sounded.

Ones and zeroes sound better than oxide-coated polyester or vinyl. Everyone accepts this, driven to fits of pleasure by iPods, and wonders why a few of us can't: the kid in Best Buy who shrugs when you ask if there are any Sony Walkman cassette players left besides the two models on display; the car salesman who is pretty sure you can't get a cassette deck as standard equipment in any of the models on the lot; and the record industry, which saw the cassette format slip to below 4 percent of total music sales last year (from a mid-1980s high of 66 percent) and has decided to let it quietly hiss into history.

Someday music will be only air. There will be no objects to hold or fetishize and people will simply collect lists. No disc, nothing spooled or grooved, nothing to scratch or break, no heads to clean, no dust to wipe, no compulsive alphabetizing. Nothing to put away in shoe boxes in spare closets and be embarrassed about.

The end of hiss.

The end of the sound system as furniture.

The end, on some strange and intellectually picky level, of the crucial dialectic between Side A and Side B, and

the idea that songs talk to one another and take you someplace.

Is the death of the cassette as sweetly sad as the death, years ago, of the vinyl record?

No, the professor sighs. Well, maybe yes. "It's a mixed romance," Jaczko says. "From a fidelity standpoint, I'll be happy to see cassettes go. I never felt the way about tapes that I did about my albums -- the sound, the beautiful art on the cover. Tapes never had that romance, but . . . we do lose something with the romance of making someone a mix tape.

"My wife," he says, "is the queen of the mix tapes."

He used to make them so carefully for her, when they were falling in love.

The whole, fraught, goosebumpy methodology of it. The ego involved. Releasing the "pause" button so precisely to start recording. Rewinding and re-recording over awkward and unintended song choices and segues, the way a lover stammers to articulate his emotions. "Fitting the songs just right so they would fill up each side," he says. "The songs titles lovingly handwritten on the inside of the case. I find old mix tapes in drawers now, and they're like a personal record, like finding an old letter."

He has not yet burned any love CDs for her.

"There's something about pointing and clicking," he says. "It's not quite the same."

The Tape Head's Lament

Long-distance love affair by cassette tape: It happened to me. While digital romances grow increasingly common, our strange fling was quaintly analog. We talked on the phone for hours and enjoyed the occasional mushy rendezvous in the flesh at airports and bookstores and bars. But mostly, we wore out the heads on our respective tape decks compiling Memorex mash notes. I'm not really the scented envelope kind of girl, preferring instead to send yellow Jiffylite mailers packed with whatever song is on my mind.

-- Sarah Vowell, "Thanks for the Memorex"

The tape will die, but the tactile nature of it, and some of the lexicon, will remain: "Fast forward" will always mean something, will forever recall the chirpy, panicky sound of tape being sped to and fro, as its surgeon-fingered listeners searched for a particular few seconds of words or music; and how that gibberishy sound came to stand, as aural icon, for haste and excitement, or for admissions of guilt, or certain refrains where you don't know what the singer is singing, so you RR or FF to it, back to it, back to it, back to it, back to it: *dweee-deely-wedee-deely-we-dwee-deely-wweeeeee-dweeeep.*

Brown, shiny, unforgiving tape will always recall Richard Nixon's missing 18 minutes on those little reels, and the haunting almost-silence of something that's been taped over. Cartoonists always drew him tangled up in tape.

Brittle, plastic cassette cases will always have that perfect inelegance about them; sticking the eraser end of a No. 2 pencil into a hole and cranking it around and around to reel in a tangle of belched-up tape.

The sound of warped tape will always be the acid reflux of the stereophonic realm, the long *bwurpy* slowdown that rolls around every 2 1/2 seconds.

And the hiss.

All those engineers in the 1970s who labored intensively to eliminate the hiss.

Your ex-brother-in-law and his obsession with the hiss: In that dark, ferny apartment of theirs, tinkering with his high-end system on a bookshelf made of milk crates, playing "Chicago V" on pizza-size tape reels and defying you to hear any hiss.

Reeling In the Years

Tape, the fast-forwarded version:

Oberlin Smith, a cohort of Edison, described magnetic recording in an issue of Electrical World magazine in 1888, conceiving of a magnet and a string dipped in iron filings. The idea had come to him 10 years before that, but he didn't build it. Valdemar Poulsen made magnetic heads in 1894, patented it as the telegraphone, and recorded Austria's Emperor Franz Josef mouthing off at the 1900 Paris Expo.

Then the Germans. (Always the Germans.) Pfleumer and his magnetic powders, followed by the invention of clunky-looking contraptions like the *Stahltonbandmaschine,* a steel tape recorder, circa 1930. Then came the wire recorder.

At the German Radio Exhibition of 1935 (a world away, Elvis was being born; see how unrelated events happen to work together), the chemical conglomerates Badische Anilin & Soda-Fabrik (BASF) and Allgemeine Elektrizitäts-Gesellschaft (AEG) unveiled the first mass-produced tape recorder, the Magnetophon. (It looked roughly like the reel-to-reel machines of yore, the kind that later would be set to self-destruct in TV spy shows. The London Philharmonic was the first group to make a tape recording, at a concert appearance in Ludwigshafen.

Then the war.

Concentration camp prisoners worked in the BASF factories.

Later, an American colonel, John T. Mullin, was sent to Germany to investigate Nazi technology. He came back with something that blew the mind of Bing Crosby, who then used tape to record his radio shows starting in 1947.

Royal Philips Corp. developed the Compact Cassette in 1963, but couldn't quite get the mechanism perfected and standardized until about 1966. The cassette became available -- expensive, and without identity. It was supposed to be the future, but the future of . . . what, exactly? Answering machines? Dictation? Audiophilia?

Only in 1979, with the appearance of the Sony Walkman, does it become quite clear:

The cassette was invented to make sure that you would not have to listen your mother, in any environment, but especially in the car, from the ages of 13 to 15.

Please take off those headphones.

I'm not going to tell you again.

I was talking to you and you weren't even hearing me.

Can you hear me?

Nor would anyone have to listen to people on the bus, on the street, or in hallways, or anywhere.

So-called Generation X, the people born between 1964 and 1981, who don't get credited for much in history, can at least take solace in the fact that they saw the entire lifespan of the cassette. It was born, lived and died in their era. They made it happen, one cassette at a time.

Mowing endless lawns with a tape of Huey Lewis and the News feeding into their brains. College kids in Replacements or R.E.M. T-shirts with so many cassette tapes strewn across their apartment floors.

(Upon review, a warpy cassette tape reveals just how little news was reported by Huey Lewis and the News.)

The history of the cassette must concede this: Old tapes are hard to love.

High Bias

I spent hours putting that cassette together. To me, making a tape is like writing a letter -- there's a lot of erasing and rethinking and starting again, and I wanted it to be a good one, because . . . to be honest, I hadn't met anyone as promising as Laura since I'd started the DJ-ing, and meeting promising women was what the DJ-ing was supposed to be about. A good compilation tape, like breaking up, is hard to do. You've got to kick off with a corker, to hold the attention . . . and then you've got to up it a notch, or cool it a notch, and you can't have white music and black music together, unless the white music sounds like black music, and you can't have two tracks by the same artist side by side, unless you've done the whole thing in pairs and . . . oh, there are loads of rules.

-- Nick Hornby, "High Fidelity"

"They're starting to warp a little bit in terms of sound," laments Bree Freeman, a Marist College communications professor in Poughkeepsie, N.Y., whose enormous cassette collection was amassed when he ran an alternative AM station in Pittsburgh in the 1980s. "In terms of the sound, they don't hold it forever. I don't think I ever thought, with my cassettes, 'Gee, you know 10 years from now . . . ' But they still sound okay," he says. "I've got copies I made of tapes I made for girls when we were dating. There's nothing like listening to those. I'm not married yet, so I can still keep those things."

"I'm one of the defectors," says Jim Januszewski, a Seattle software engineer who runs a Web site in his spare time called Art of the Mix, where visitors submit playlists of mix tapes (now mostly mix CDs) they consider to be a perfect expression of the form. "I just like MP3 better, it's so much easier," he says. "With the tapes you could screw it up. Now you just move it around, when this song doesn't work with that song."

These matters are still handled with a certain measure of love, Januszewski says. "Only better. People still take time to think of the songs, to design their own covers. Is it a high art form? No. Not really. But it does give agency to the music listener. It makes it something more than a passive experience. That's what we learned with the cassette tape -- you could do it on your own."

Pocket-Size Revolution

Vinyl: Soothing, it sounded like velvet.

Compact disc: Crisp and clean, it sounded like linen sheets.

Cassette: Frankly, it sounded like acrylic-blend sweaters.

"I don't buy records in your shop, I tape 'em all, off 'Top of the Pops' . . . I don't need no album rack, I carry my collection on my back," screamed Annabella Luwin, the mohawked teenage lead singer of a British band called Bow Wow Wow, in a 1980 single called "C30, C60, C90, Go!," a homage to the self-recorded cassette tape. (In fact, it is believed to be the first single released only on cassette.)

C30, C60, C90, Go!

Off the radio, I get a constant flow

Hit it! Pause it! Record it and play

Or turn it on, rewind and rub it away!

Blank cassettes were supposed to ruin the record industry, the way almost every technological shift is, at first, supposed to ruin the record industry.

"Statistically, that wasn't borne out," says Peter Brinkman, vice president of marketing at Maxell Corp. of America, the leading manufacturer of blank audiotape. "Cassette tapes, it turned out, were a great enabler of the music industry."

Maxell, which started selling blank cassettes in 1970, rose to prominence in the early '80s on a reputation of high-bias, low-noise audiophilia of the first order.

Old issues of Rolling Stone are strewn with pages and pages of advertising for tape decks and the latest in blank tape. In 1978, Maxell first ran its trademark ad -- an arty black-and-white photograph of a man in a chair wearing Ray-Ban sunglasses, enduring a high-fidelity torrent of sound that appears to be literally tearing through his living room with storm-force winds.

"No one could have predicted how it would become this icon," Brinkman says.

The ad, still used to promote the company's digital products, became an emblem of that new wave, designer rock, audiophilic, MTV personality type: The kind of guy who believed his music choices were always better than yours. His tastes could not be questioned or mucked with. (Neither, for that matter, could yours. Ego was key.) It was a nation of tapeheads, living on some social margin, out past the faint hiss, waiting for nuclear war.

Ten years ago, Maxell sold "easily" 350 million blank audiocassettes, Brinkman says.

Last year, the company sold 130-140 million blank cassettes. Projections for future sales, industry-wide, indicate that tape will slide into obsolescence by decade's end.

Fade Out

A cassette tape lets you know when it's dying.

It starts to give off the sound of music that would be played by a very small band in a suitcase, and then it sounds like that suitcase is inside another suitcase. It sounds like the singer is wearing little socks on his teeth. Consonants go away. Dolby Noise Reduction technology gives up, and if you didn't know what "Sussudio" meant in the summer of 1985, then there's no hope of knowing now, not when you pop in the cassette version.

Everything unspools.

Tonight you are feeling faithful anyhow. There's a tape in you trying to get out, and you feel like doing it the old way. You will stay home, by yourself, have a drink, and turn your attention to the bulky components stacked like artifacts in homage to bachelorhood. With the teak-colored stereo speakers large enough to rest your beer upon.

All the important cords are jacked into the tape deck.

Obsessing into the small hours, pulling record sleeves from the shelves, the LED display pulsing into the red zone when you record. You can nudge the knobs toward more bass. High bias, normal bias, basically you're just biased. You are very careful, like a doctor on the verge on the sheer genius.

(Or: madness.)