In 1997, your cell phone could make two kinds of sounds. It could “ring”—our anachronistic word for the electronic trill that phones produce when you receive a call—or it could play a single-line melody, like “Für Elise.” If you’ve ever heard a cell phone bleep out Beethoven without the harmony, you’ll understand that this wasn’t much of a choice. At about this time, Nokia, the Finnish cell-phone company, introduced “smart messaging,” a protocol that allowed people to send text messages to one another over their phones, and Vesa-Matti Paananen, a Finnish computer programmer, realized that it would work equally well for transmitting bits of songs. Paananen developed software called Harmonium that enabled people to program their cell phones to make musically complex sequences—melodies with rudimentary harmonic and rhythmic accompaniment—that they could forward to friends using smart messaging.

Those familiar with Linux, the freely available, open-source operating system developed by Linus Torvalds, another Finnish programmer, will not be shocked to learn that Paananen, in a nationally consistent fit of altruism, put Harmonium on the Internet for anyone to download, thus passing up a shot at becoming a billionaire. Companies called aggregators, which collect and distribute digital content, capitalized on Paananen’s innovation, using his software to create what is today known as the polyphonic ringtone: a
small packet of code that plays the phone as if it were a music box, producing a synthesized approximation of a song that often sounds less like the original it emulates than a gremlin making merry inside a video game. Recently, the polyphonic ringtone acquired a competitor. Called a master tone, or true tone, it is a compressed snippet of actual recorded song, and emanates from the cell-phone handset as if from a tiny radio.

Ringtones of either variety cost about two dollars and are typically no more than twenty-five seconds long. Nevertheless, according to Consect, a marketing and consulting firm in Manhattan, ringtones generated four billion dollars in sales around the world in 2004. The United States accounted for only three hundred million of these dollars, although Consect predicts that the figure will double this year. Fabrice Grinda, the C.E.O. of Zingy, a company in New York that sells ringtones and cell-phone games, told me that in parts of Asia ringtones now outsell some types of CDs. “In 2004, the Korean ringtone market was three hundred and fifty million dollars, while the CD market for singles was just two hundred and fifty million,” Grinda said.

But America is catching up. Anyone who watches MTV has probably seen ads for a company called Jamster.com, which sells polyphonic ringtones as well as cruder, monophonic versions for older handsets. For a small fee (about six dollars a month), you can buy ringtones from Jamster by entering numerical codes on your phone’s keypad. This method is popular in Europe and is generally faster than the standard American approach: using your phone’s Web browser to scroll through pages of song titles. Most companies allow you to sample a tone before you buy it, but not all ringtones are compatible with all cell phones, so don’t get too excited if your favorite band is offering ringtones on its Web site. The song snippets may work only on that old phone you gave away to your nephew.

Consect reports that fifty-six per cent of the ringtones bought in the United States during the first half of 2004 were hip-hop, and Mark Freiser, Consect’s C.E.O., says that the vast majority of ringtone users are under the age of thirty. Teens like to assign different
ringtones to different callers: something classical for Mom, an old hip-hop song for the roommate, a more recent track for the new boy in town. Since teens are fond of both hip-hop and cell phones, and have more friends than parents, it’s no wonder that hip-hop ringtones rule. Of course, what’s available to customers determines what they’ll buy. Marketers in the mobile-media industry call these purchases “preferences.” And they are right: ringtones, like the screen savers and plastic face plates that you can use to customize your phone, constitute a form of self-expression, though what you choose to tell the world about yourself is limited by a finite library of images and sounds.

A kid I met on the subway told me that his mother doesn’t like his new 50 Cent ringtone, “Candy Shop,” not because it features explicitly sexual rhymes but because it’s not as cool as “In Da Club,” a previous 50 Cent ringtone, which received *Billboard*’s first Ringtone of the Year award, in 2004. A karate teacher in his thirties told me that he spends ten dollars a month on ringtones, and currently has about twenty, most of them polyphonic renditions of Led Zeppelin songs. An architect in her mid-thirties said, “I spent three days of productive work time listening to polyphonic ringtone versions of speed metal, trying to find exactly the ringtone that expressed my personality with enough irony and enough coolness that I could live with it going off ten times a day. In a quiet room, in a meeting, this phone’s gonna go off—what are they going to hear?”

The ringtone also teaches us how songs work. Which clip best exemplifies a song? Did the ringtone’s maker select the right bit? Do you even need to hear the singing? Perhaps the part of the song that arouses our lizard brain is the instrumental opening. It may be stranger and more sublime to hear a polyphonic impression of George Michael’s voice than to listen to the real thing one more time. If a song can survive being transposed from live instruments to a cell-phone microchip, it must have musically hardy DNA. Many recent hip-hop songs make terrific ringtones because they already sound like ringtones. The polyphonic and master-tone versions of “Goodies,” by Ciara, for example, are nearly identical. Ringtones, it turns out, are inherently pop: musical
expression distilled to one urgent, representative hook. As ringtones become part of our environment, they could push pop music toward new levels of concision, repetition, and catchiness.

I spent more than a year sampling polyphonics, but felt stymied by the master tone, which has been trumpeted as superior because it is taken from the original recording. The first master tones I downloaded on my cell phone sounded terrible, like a transistor radio turned up to ten and stuffed inside a sock. I missed my primitive polyphonic tootles. When I finally upgraded to a newer phone, the master tones suddenly made sense. The sock was off and the radio was hi-fi. I felt the way I imagine someone who had a color TV in 1954 must have felt. I was hearing actual music, and I chose Kelis’s “Milkshake” as my ringtone, guessing that the song might not be audible above the clangor of the streets but knowing that the alliance would be brief and that I’d soon be switching.

In the United States, master tones can be played only on phones available for the last year and a half, yet they already account for nearly fifty per cent of ringtone sales. Musical genres that suffered as polyphonics—sonically thick guitar rock, country, and jazz—can now challenge the hip-hop hegemony. Record labels, convinced that they have lost millions of dollars in CD sales to MP3 file-swapping, have been especially attentive to ringtones, and they love master tones.

Polyphonic ringtones are essentially cover versions of songs: aggregators must pay royalties to the publisher, who then pays the songwriter. But master tones are compressed versions of original recordings, which means that record labels—the entities that typically own recordings—are entitled to collect a fee, too.

That fee can be considerable: record labels get twenty-five per cent of every master-tone sale (though they must pass along a portion of their take to the performer and the publisher). “It’s an unbelievable mess,” Les Watkins, the vice-president of Music Reports, Inc., a music-licensing and accounting firm, said. “A lot of these aggregator companies were very
early players, essentially beholden to the major record labels and the music publishers to get the rights they needed. And, in this country, the music business is a very mature and consolidated business—somewhat collusive, in fact. The aggregators accepted rates and terms that they really didn’t have to accept, and agreed to license the music in such a way that they’re overpaying by a tremendous multiple.”

This arrangement is unlikely to last. There are now Web-based companies, like Xingtone, for example, that will convert songs from your collection into master tones. Or you can do it yourself: some new cell-phone models can be connected to a computer by a data cable, allowing you to create master tones from MP3 files at home. However it is done, transferring music that you own to your phone is legal under copyright law.

Technically adept fans may thrill at the prospect of being able to make master tones for free. But the demise of the polyphonic will be a minor, and poignant, loss for music. The advent of film sound gave us the infinite blessing of composers like Ennio Morricone and Bernard Herrmann, but it took away the perfect trinity of the oncoming train, the imperilled heroine, and the trembling upper register of an upright piano. Next time you hear your favorite song playing in full verisimilitude from someone’s pants, give a moment’s thought to the lowly, twinkling polyphonic. Transitional stages of technology often have their own imperfect charms, memorable in ways that no one could have predicted. Polyphonic-ringtone nostalgia is approximately six months away. ✪
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