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Liam Baranauskas

*University of Mississippi*

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NOTES ON DISTANCE DIALING

A Thesis  
presented in partial fulfillment of requirements  
for the degree of Master of Fine Arts in Creative Writing  
The University of Mississippi

by

LIAM BARANAUSKAS

August 2015

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## ABSTRACT

My mom thought watching professional wrestling would turn me gay, so I saw the WWF mostly at my dad's house, on his twelve-inch black and white television with aluminum foil for an antenna. Every other week I got two hours of gyrating pretty boys, unexamined racism, heavy breathing, and the occasional obese man whose blubbery folds could endure endless punishment until he ended his match by sitting on his opponent. There was a Jewish accountant wrestler who would berate the crowd for cheating on their taxes. There was "Kamala the Ugandan Giant." There was a clown. The greytoned pixels on my dad's tiny television gave all this a timeless, literary quality, in the same way that Cary Grant can cross his eyes and do a spit-take and still end a scene without any champagne on his lapels

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## CHAPTER 1

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin, I've found, is often relative. I had thought it was all a good joke, especially when the phone

charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiber optics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I

know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as "phone phreaks" had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day they he'd soldered their connections. It was a clear parole violation to use it if they caught me,



and if I were being a little less reckless I would have at least headed down to the pizza place to make a call from the pay phone there, but the urge to connect with another human being can be so strong at times that no risk seems too great to remove the heavy burden of loneliness. I hope you've experienced this urge at some point in your life, if only because it means you must have also experienced true connection.

I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter

of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

What I'm saying is that the more difficult it is to pursue your dreams, the more dangerous it is to let them go!

This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes

bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

The ant fell off when Mickey put the record back in its sleeve, landing upside down in the thicket of crumby, matted shag. In the new world thrust upon him, the ant righted himself and tried to make do. It's a hard life for all of us!

Mickey Deutsch was the only person Nathan had ever met who would listen to (encourage, even!) his endless talk of American Telephone & Telegraph's tandems and crossbars, about how wonderful it was that the phone company had created a system that was triggered by sound, about the tiny gaps in this system where the pieces didn't quite fit flush, imperfections which made it even better. Nathan must have recounted every discovery he'd made since he was a kid within the forever-expanding loom of wires and switching stations stretched across the country before he'd veered into talking about music—which (he claimed) was the same thing as telephones, really, since jazz musicians used songs to navigate the rules of a system and then to find where those rules gave way, to speak the magic words that opened hidden doors. Mickey had first convinced Nathan to come to one of the radio station meetings

only out of surprise and encouragement at the fact that Nathan had a second interest, though to Nathan, there was no difference between the two.

This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself open beneath the lace as she took his girth into her hand.”” His voice had dropped a half-octave,

becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

“Girth,” Mickey said. “Way far out. And it gets better.”

Mickey was an acne-ridden economics major who kept one of his cuffs tucked into his socks for use his pants legs as emergency storage for what he called “liberated goods.” He only really cared about the radio station because there was so much to steal there. He didn’t go in for the equipment of the studio proper, but the cakewalk of the broken and uninventoried junk in the storage room. It didn’t matter to Mickey whether he was stealing the capacitors or resistors Nathan wanted for his telephone experiments (or, occasionally, his engineering lab homework) or a whole portable Nagra reel-to-reel deck to hock at a pawn shop for extra cash—theft gave him a flood of almost sexual energy. Once, he’d almost been caught shoplifting from the John Wanamaker department store when the pleasure had flushed his pockmarked face and shook his fingers, attracting the attention of the floor dick on duty.

In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks which fell open to the good parts if you dropped them. It had been his idea, both times. Selling

phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

"Damn it, " she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing

jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk’s drugs made his story big enough that he had to play three saxophones at once to



tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by miners and farmers singing about love and rivers and murder. They always sounded strangely

academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

He had begun practicing being blind when he realized that his bad-now-good left eye was turning worse with the strain after the accident. He’d counted steps everywhere he went and practiced drawing, without looking, a mental map of the places he passed through. If they dropped the big one in the UPenn Quad, he’d be the hero who’d be able to point through the disorienting rubble and say, here was Hassenfeld, here was Ware, here was Hill (the women’s dormitory), here was Moore, where, sitting idle in the basement for fifteen years stood ENIAC, the first general-purpose, Turing-complete computer, which was so big it used to make all the lights in the city dim when they switched it on.

“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”

Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

Mickey grunted an affirmative grunt.

“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

“Nope,” Mickey said. “You’ve got to strike when the iron’s hot.”

“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 2

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

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This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes

bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

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only out of surprise and encouragement at the fact that Nathan had a second interest, though to Nathan, there was no difference between the two.

This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself open beneath the lace as she took his girth into her hand.”” His voice had dropped a half-octave,

becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

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In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks which fell open to the good parts if you dropped them. It had been his idea, both times. Selling

phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

"Damn it," she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing

jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk’s drugs made his story big enough that he had to play three saxophones at once to

tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by miners and farmers singing about love and rivers and murder. They always sounded strangely

academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

He had begun practicing being blind when he realized that his bad-now-good left eye was turning worse with the strain after the accident. He’d counted steps everywhere he went and practiced drawing, without looking, a mental map of the places he passed through. If they dropped the big one in the UPenn Quad, he’d be the hero who’d be able to point through the disorienting rubble and say, here was Hassenfeld, here was Ware, here was Hill (the women’s dormitory), here was Moore, where, sitting idle in the basement for fifteen years stood ENIAC, the first general-purpose, Turing-complete computer, which was so big it used to make all the lights in the city dim when they switched it on.

“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”



Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

Mickey grunted an affirmative grunt.

“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

“Nope,” Mickey said. “You’ve got to strike when the iron’s hot.”

“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

### CHAPTER 3

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin,

I've found, is often relative. I had thought it was all a good joke, especially when the phone charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiberoptics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He

laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as “phone phreaks” had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day

they he'd soldered their connections. It was a clear parole violation to use it if they caught me, and if I were being a little less reckless I would have at least headed down to the pizza place to make a call from the pay phone there, but the urge to connect with another human being can be so strong at times that no risk seems too great to remove the heavy burden of loneliness. I hope you've experienced this urge at some point in your life, if only because it means you must have also experienced true connection.

I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

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addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk's drugs made his story big enough that he had to play three saxophones at once to tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by

miners and farmers singing about love and rivers and murder. They always sounded strangely academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

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“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”

Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

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“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 4

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin,



I've found, is often relative. I had thought it was all a good joke, especially when the phone charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiber optics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He

laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as “phone phreaks” had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day

they he'd soldered their connections. It was a clear parole violation to use it if they caught me, and if I were being a little less reckless I would have at least headed down to the pizza place to make a call from the pay phone there, but the urge to connect with another human being can be so strong at times that no risk seems too great to remove the heavy burden of loneliness. I hope you've experienced this urge at some point in your life, if only because it means you must have also experienced true connection.

I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and

Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

What I'm saying is that the more difficult it is to pursue your dreams, the more dangerous it is to let them go!

This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light

he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

The ant fell off when Mickey put the record back in its sleeve, landing upside down in the thicket of crumby, matted shag. In the new world thrust upon him, the ant righted himself and tried to make do. It's a hard life for all of us!

Mickey Deutsch was the only person Nathan had ever met who would listen to (encourage, even!) his endless talk of American Telephone & Telegraph's tandems and crossbars, about how wonderful it was that the phone company had created a system that was triggered by sound, about the tiny gaps in this system where the pieces didn't quite fit flush, imperfections which made it even better. Nathan must have recounted every discovery he'd made since he was a kid within the forever-expanding loom of wires and switching stations stretched across the country before he'd veered into talking about music—which (he claimed) was the same thing as telephones, really, since jazz musicians used songs to navigate the rules of

a system and then to find where those rules gave way, to speak the magic words that opened hidden doors. Mickey had first convinced Nathan to come to one of the radio station meetings only out of surprise and encouragement at the fact that Nathan had a second interest, though to Nathan, there was no difference between the two.

This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself

open beneath the lace as she took his girth into her hand.” His voice had dropped a half-octave, becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

“Girth,” Mickey said. “Way far out. And it gets better.”

Mickey was an acne-ridden economics major who kept one of his cuffs tucked into his socks for use his pants legs as emergency storage for what he called “liberated goods.” He only really cared about the radio station because there was so much to steal there. He didn’t go in for the equipment of the studio proper, but the cakewalk of the broken and uninventoried junk in the storage room. It didn’t matter to Mickey whether he was stealing the capacitors or resistors Nathan wanted for his telephone experiments (or, occasionally, his engineering lab homework) or a whole portable Nagra reel-to-reel deck to hock at a pawn shop for extra cash—theft gave him a flood of almost sexual energy. Once, he’d almost been caught shoplifting from the John Wanamaker department store when the pleasure had flushed his pockmarked face and shook his fingers, attracting the attention of the floor dick on duty.

In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks



which fell open to the good parts if you dropped them. It had been his idea, both times. Selling phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

“Damn it, “ she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was

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## CHAPTER 5

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I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and

Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

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which fell open to the good parts if you dropped them. It had been his idea, both times. Selling phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

“Damn it, “ she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was



addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk's drugs made his story big enough that he had to play three saxophones at once to tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by

miners and farmers singing about love and rivers and murder. They always sounded strangely academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

He had begun practicing being blind when he realized that his bad-now-good left eye was turning worse with the strain after the accident. He’d counted steps everywhere he went and practiced drawing, without looking, a mental map of the places he passed through. If they dropped the big one in the UPenn Quad, he’d be the hero who’d be able to point through the disorienting rubble and say, here was Hassenfeld, here was Ware, here was Hill (the women’s dormitory), here was Moore, where, sitting idle in the basement for fifteen years stood ENIAC, the first general-purpose, Turing-complete computer, which was so big it used to make all the lights in the city dim when they switched it on.

“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”

Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

Mickey grunted an affirmative grunt.

“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

“Nope,” Mickey said. “You’ve got to strike when the iron’s hot.”

“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 6

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin, I've found, is often relative. I had thought it was all a good joke, especially when the phone

charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiber optics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I

know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

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"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

"Damn it, " she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing

jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk’s drugs made his story big enough that he had to play three saxophones at once to

tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by miners and farmers singing about love and rivers and murder. They always sounded strangely

academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

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“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”



Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

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“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

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“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 7

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin,

I've found, is often relative. I had thought it was all a good joke, especially when the phone charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiberoptics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He

laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as “phone phreaks” had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day

they he'd soldered their connections. It was a clear parole violation to use it if they caught me, and if I were being a little less reckless I would have at least headed down to the pizza place to make a call from the pay phone there, but the urge to connect with another human being can be so strong at times that no risk seems too great to remove the heavy burden of loneliness. I hope you've experienced this urge at some point in your life, if only because it means you must have also experienced true connection.

I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and

Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

What I'm saying is that the more difficult it is to pursue your dreams, the more dangerous it is to let them go!

This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light

he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

The ant fell off when Mickey put the record back in its sleeve, landing upside down in the thicket of crumbly, matted shag. In the new world thrust upon him, the ant righted himself and tried to make do. It's a hard life for all of us!

Mickey Deutsch was the only person Nathan had ever met who would listen to (encourage, even!) his endless talk of American Telephone & Telegraph's tandems and crossbars, about how wonderful it was that the phone company had created a system that was triggered by sound, about the tiny gaps in this system where the pieces didn't quite fit flush, imperfections which made it even better. Nathan must have recounted every discovery he'd made since he was a kid within the forever-expanding loom of wires and switching stations stretched across the country before he'd veered into talking about music—which (he claimed) was the same thing as telephones, really, since jazz musicians used songs to navigate the rules of



a system and then to find where those rules gave way, to speak the magic words that opened hidden doors. Mickey had first convinced Nathan to come to one of the radio station meetings only out of surprise and encouragement at the fact that Nathan had a second interest, though to Nathan, there was no difference between the two.

This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself

open beneath the lace as she took his girth into her hand.” His voice had dropped a half-octave, becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

“Girth,” Mickey said. “Way far out. And it gets better.”

Mickey was an acne-ridden economics major who kept one of his cuffs tucked into his socks for use his pants legs as emergency storage for what he called “liberated goods.” He only really cared about the radio station because there was so much to steal there. He didn’t go in for the equipment of the studio proper, but the cakewalk of the broken and uninventoried junk in the storage room. It didn’t matter to Mickey whether he was stealing the capacitors or resistors Nathan wanted for his telephone experiments (or, occasionally, his engineering lab homework) or a whole portable Nagra reel-to-reel deck to hock at a pawn shop for extra cash—theft gave him a flood of almost sexual energy. Once, he’d almost been caught shoplifting from the John Wanamaker department store when the pleasure had flushed his pockmarked face and shook his fingers, attracting the attention of the floor dick on duty.

In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks

which fell open to the good parts if you dropped them. It had been his idea, both times. Selling phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

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## CHAPTER 8

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laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as “phone phreaks” had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day

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I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and

Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

What I'm saying is that the more difficult it is to pursue your dreams, the more dangerous it is to let them go!

This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light

he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

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This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself

open beneath the lace as she took his girth into her hand.” His voice had dropped a half-octave, becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

“Girth,” Mickey said. “Way far out. And it gets better.”

Mickey was an acne-ridden economics major who kept one of his cuffs tucked into his socks for use his pants legs as emergency storage for what he called “liberated goods.” He only really cared about the radio station because there was so much to steal there. He didn’t go in for the equipment of the studio proper, but the cakewalk of the broken and uninventoried junk in the storage room. It didn’t matter to Mickey whether he was stealing the capacitors or resistors Nathan wanted for his telephone experiments (or, occasionally, his engineering lab homework) or a whole portable Nagra reel-to-reel deck to hock at a pawn shop for extra cash—theft gave him a flood of almost sexual energy. Once, he’d almost been caught shoplifting from the John Wanamaker department store when the pleasure had flushed his pockmarked face and shook his fingers, attracting the attention of the floor dick on duty.

In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks



which fell open to the good parts if you dropped them. It had been his idea, both times. Selling phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

“Damn it, “ she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was

addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk's drugs made his story big enough that he had to play three saxophones at once to tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by

miners and farmers singing about love and rivers and murder. They always sounded strangely academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

He had begun practicing being blind when he realized that his bad-now-good left eye was turning worse with the strain after the accident. He’d counted steps everywhere he went and practiced drawing, without looking, a mental map of the places he passed through. If they dropped the big one in the UPenn Quad, he’d be the hero who’d be able to point through the disorienting rubble and say, here was Hassenfeld, here was Ware, here was Hill (the women’s dormitory), here was Moore, where, sitting idle in the basement for fifteen years stood ENIAC, the first general-purpose, Turing-complete computer, which was so big it used to make all the lights in the city dim when they switched it on.

“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”

Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

Mickey grunted an affirmative grunt.

“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

“Nope,” Mickey said. “You’ve got to strike when the iron’s hot.”

“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 9

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin,

I've found, is often relative. I had thought it was all a good joke, especially when the phone charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiberoptics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

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“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

““She fell to her knees and with the decisiveness of a governor signing an order of execution,”” he read, ““and Ophelia freed his manhood from its denim prison. She felt herself

open beneath the lace as she took his girth into her hand.” His voice had dropped a half-octave, becoming deeper and more measured, until he said, “They have to do it fast, before her benefactress gets back.”

“Denim prison,” Nathan said. “That’s good.” He drummed on his leg, as if he could will the tempo of the song spinning on the turntable to speed up. The dormitory halls were usually clear on Wednesday afternoons, and if he hurried back from the studio, sometimes he could get in a good hour at the coin phone before he’d be interrupted. His show still had fifteen minutes left.

“Girth,” Mickey said. “Way far out. And it gets better.”

Mickey was an acne-ridden economics major who kept one of his cuffs tucked into his socks for use his pants legs as emergency storage for what he called “liberated goods.” He only really cared about the radio station because there was so much to steal there. He didn’t go in for the equipment of the studio proper, but the cakewalk of the broken and uninventoried junk in the storage room. It didn’t matter to Mickey whether he was stealing the capacitors or resistors Nathan wanted for his telephone experiments (or, occasionally, his engineering lab homework) or a whole portable Nagra reel-to-reel deck to hock at a pawn shop for extra cash—theft gave him a flood of almost sexual energy. Once, he’d almost been caught shoplifting from the John Wanamaker department store when the pleasure had flushed his pockmarked face and shook his fingers, attracting the attention of the floor dick on duty.

In the two months they’d known each other, Nathan and Mickey had committed self-abuse together twice, both times Mickey reading improbable tales from 45-cent paperbacks

which fell open to the good parts if you dropped them. It had been his idea, both times. Selling phone calls was Mickey's idea, too. Nathan could have done without both the radio show and the jerking off, but it was nice to have a little money in his pocket, and it was even better having a friend.

Mickey turned as Rachel Ramos rapped on the studio glass to remind Nathan that her hour was next, and one of the 78s fell from the big stack in her arms. Her head sank below the window and she came back up frowning. He snapped the book shut and slid it under his legs in the chair when she opened the door.

"I cracked my Black Mary," she said. Her voice was a muted bell, even more pinched than usual. "It's my best record."

"So get another one," Mickey said.

"There might not be another one," Rachel said.

"You could throw it out," Nathan said. "Then the crack would be nobody's fault."

"Nathan can call the record store," Mickey said. "He doesn't even need a dime."

"I know," Rachel said. "You've told me." She switched the studio lights on and held the disc up.

"Man, that's nothing," Mickey said, running his eyes over the crack as if his vision were a stylus, with a confidence proved misplaced when Rachel put the record on the spare turntable and dropped the needle, and an audible pop marred every rotation, even without the sound amplified.

“Damn it, “ she said, and smacked the mixing console with the palm of her hand, her thumb knocking the scratchy master fader upwards. The volume on the side Nathan was playing jumped and the room filled with a wordless chant and arrhythmic bongos. He started to fade the song back down, then decided to end it there and pressed the talkback button to activate the microphone while he cleared his throat.

“Rachel,” Mickey said in a stage whisper. “Wherever your boyfriend is, we can call him. Only one dollar. Just let me know. Step right up.”

“You sound like a carny,” Rachel said.

They had to stop talking so Nathan could read the station identification. It was his least favorite task of his hour on-air. He hated placing his lips to the cold microphone, sending his disembodied voice over the unstable air—reading off track listings, making public service announcements. The names of the musicians and their records weren’t important—what mattered was their stories, the ones they told using their strange manipulation of order instead of words. The grooves on a record, like the wires on a telephone, wrapped stories as snug as blankets on a winter night. Talking on the radio was sending words out into a cold void, like being lost on one of the Apollo missions, left to drown forever in oceanic space.

“Or for when you call home,” Mickey whispered. “No more spending two-sixty for just five minutes. And it’s more to Puerto Rico, right?”

“I’m Jewish,” Rachel said. “I’m from Ardmore.”

Nathan waved his arms again while he stumbled over names, trying to remember. It went like this: Sun Ra said he’d been to Saturn, Mose to low Mississippi cotton fields. Monk was



addicted to drugs, and so was Bird, who sounded like he hated you for listening to him. Roland Rahsan Kirk's drugs made his story big enough that he had to play three saxophones at once to tell it. Mingus' drugs made him hate litterboxes, so he taught his cat to use the toilet. Miles' drugs made him hate everything. It was as if these musicians needed something to help them speak, and when they did their ideas came in an endless rush, spraying out like hose water when you put your thumb over the nozzle. Nathan had never even smoked a joint but held out hope that maybe being himself was a state altered enough, that being almost blind and fat and balding at eighteen and wearing weird pants his sister bought him that Mickey said looked like two post-explosion Zeppelins deflating from his waist would turn out to be a "because," not an "even though."

Mickey put on the last record of Nathan's show after he'd made it through the last artist and track on the list. "Oh, gross, Nathan," Rachel said, taking her place behind the console. "The seat's all sweaty."

"Help the needy, feed the pores," Nathan said.

"Wipe it off, man," Rachel said.

Nathan asked Mickey if there were any chamois cloths around. There was a grin in Mickey's voice when he said he'd used them all.

"God," Rachel said. "Pigs."

She started one of her plinky records when Nathan's last one finished. Those 78s spun too fast for an ant to stand a chance! Rachel was a dean's list sophomore who played music she found on anthropological field studies in the Appalachians, and the songs she liked were by

miners and farmers singing about love and rivers and murder. They always sounded strangely academic to Nathan, fingerpicked cubes and cylinders conjuring themselves in the air. She kept time with a pencil on her leg while the record played.

“You know what?” she said, as Nathan held the studio door open for Mickey. “I do need to make a call. Nathan, can you be at Hill House in an hour and a half?”

“I don’t know,” Nathan said. “I’m pretty busy today.”

“We’ll be there,” Mickey said.

When the door shut behind Nathan and Mickey, the banjos and death cut off like the line had been clipped. They walked up the stairs and out into the Quad. October hadn’t yet turned and orange sunlight washed over them. Nathan took off his regular glasses and put on his dark ones, and felt like he had disappeared.

He had begun practicing being blind when he realized that his bad-now-good left eye was turning worse with the strain after the accident. He’d counted steps everywhere he went and practiced drawing, without looking, a mental map of the places he passed through. If they dropped the big one in the UPenn Quad, he’d be the hero who’d be able to point through the disorienting rubble and say, here was Hassenfeld, here was Ware, here was Hill (the women’s dormitory), here was Moore, where, sitting idle in the basement for fifteen years stood ENIAC, the first general-purpose, Turing-complete computer, which was so big it used to make all the lights in the city dim when they switched it on.

“Oh Jesus,” Mickey said.

“Thighs?” Nathan said.

“Creamy,” Mickey said. “Like milky stars. This cat in Ware needs to call his parents.”

Nathan could tell from the distance in his voice that he had turned around as they passed the lawn to watch the girls. He pushed his dark glasses back on his nose.

“Now?”

Mickey grunted an affirmative grunt.

“Can’t it wait?” Nathan said. “There’s this independent CSP in Saskatchewan I found that I wanted to mess around with while the hall is empty.”

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“This company uses an old Stromberg step,” Nathan said. “You should hear the echoes on their relays. Really wild stuff.”

“It’s a bad way to run a business, Nate,” Mickey said.

“If I was running a business, I’d be worried.”

Mickey walked backwards to see the last glimpses of the blankets spread on the quad, mute sirens dotting a green sea. “Oh god,” he said. “I wish you could see this. I’m dying.”

“Watch out,” Nathan said. “You might change colors.”

“Listen,” Mickey said. “We’re meeting this guy when his class lets out in the Ware lobby. I’m taking your records. We’ll go back after we make this call and you can chat with Stromberg then.”

“I don’t have a choice,” Nathan said. “Do I?”

“Choice,” Mickey said, like it was the dumbest thing he’d ever heard.

## CHAPTER 10

Most people would doubt that a note of music could circle the globe, bring a corporation to its knees, make the president of the United States flinch, or erase a man, but then most people are sighted, and deaf even to the pulsing of their own hearts. Music can do anything, and if you've learned to hear it, it's everywhere. It can even be transcribed into symbols, notes given names, to let us speak of "reading music" as if it is possible to replicate something with no weight or shape on a page, to listen without hearing. That's not what this story tries to do. Know the tree by its fruits, that's what I always say. But this is not only a story about music, it is also my story, and because I am essentially a narcissist (in this way, like most people), I will begin by telling you a short anecdote about myself. In particular, I will tell you about the last time I used a blue box. This story, like all stories, is true.

I'd been talking to my parole officer, who I'd been assigned after spending three months upstate in the disability ward of a minimum-security prison. Criminal mischief is not such a terrible crime, but they sent me up the river based on my priors. This was in 1987, a golden age for pay-per-minute vice, and what happened was that several state and local politicians had found the indulgences of \$2.99-per-minute fantasies billed to their home telephones. These fantasies were often less unsavory than you might expect; Pennsylvania senator Arlen Specter, for example, found himself charged for over a thousand dollars worth of calls to Dial-A-Muppet, as I imagined him commiserating for hours about the single-bullet theory with Fozzie Bear. Sin,

I've found, is often relative. I had thought it was all a good joke, especially when the phone charges were leaked through the Photostats and wire services of the *Inquirer's* political desk, but often the difference between a good joke and a crime is whether or not someone else finds it funny. I realize that others often do not share my sense of humor.

If you weren't alive then, what might come to mind when you think of that time is garish neon, synthesizers, and pyramid schemes. But lots of important things happened then that can't be made into cliché symbols, things you couldn't even see (and speaking for myself, everything I saw that whole decade comes to mind as a hazy smear anyway). The computer was no longer the icon of the pocket-protector set and had begun to enter middle-class living rooms all over the world. The military's ARPA technologies were finally coalescing into something that could unite all those living rooms, and even more importantly, sell stuff to them. Then a court ruling had found that AT&T had an unfair monopoly, and all of a sudden, for the first time in fifty years, new companies were challenging grand old Ma Bell, hawking buzzwords like "fiberoptics" and "low international rates." If you want to know how all those things are related, take a look in your pocket. You probably call that little chunk of silicon and plastic a phone, but how often do you really use it to make a call?

My parole officer's name was Jabari. He had a deep, mellifluous voice like a cello. I liked him and would often imagine him staying late during a home check-in for a dinner of pizza and Budweiser, a Phillies game on the radio. He asked me the usual questions and I told him the usual answers, no sir, I haven't used the phone to call anyone besides him and the pizza place around the corner since I got home, and he could check my bill if he didn't believe me. He

laughed and said, we can check more than your bill, and you know that, and I said, yes sir, I know, and by the way I think this ankle monitor is giving me a rash. I liked talking to him, and didn't want to hang up. After I did was when I was taken with an urge, an attack of nostalgia that felt as pressing as any addiction, and I dug through all my old equipment to find my blue box.

In 1987, it was still possible to use a blue box to dial long distance without being charged, because mechanical equipment (which used switches similar to the ones that shift tracks on a railroad), was what made your call get to where it was intended. You could hear machines in the background when your call was in the process of being connected, chunks and eeps and rapid, automatically dialed tones that were obviously—at least to anyone with perfect pitch—not quite the same notes as played by a touchtone phone. It's not like that anymore. If you even have a landline today, it probably operates on the same digital equipment as your mobile phone. The signal gets shot up into space, where it's beamed down right to your mother, or friend, or lover. I don't like that very much. To me, it doesn't seem as though soundless, infinite space is the ideal place for affectionate words to be sent, even if they are meant to come back. Things change when they become weightless.

My blue box had been built by a boy named Nathan Garagiola. Nathan, like most of the boys who later became known in the media and within certain government agencies (and even among themselves) as “phone phreaks” had been fascinated by the telephone from a young age, by the strange sounds it made in the points between dialing and connection, in this banal household item that could sneak you into any building in the world. The box felt solid, weighty like a ripe tomato, and its buttons pushed as smooth and rendered their tones as true as the day

they he'd soldered their connections. It was a clear parole violation to use it if they caught me, and if I were being a little less reckless I would have at least headed down to the pizza place to make a call from the pay phone there, but the urge to connect with another human being can be so strong at times that no risk seems too great to remove the heavy burden of loneliness. I hope you've experienced this urge at some point in your life, if only because it means you must have also experienced true connection.

I picked up the earpiece to the coin phone in my kitchen, a 233G three-slotter unit with no buttons, rotary, or any other obvious way to dial out, from the days when every line connected only to an operator who routed your calls through a central office. I'd fixed it up myself (with the strange idea that this would take my mind off of actually using the phone, perhaps with the same logic by which heroin addicts are given Methadone), cobbling together replacement parts from mail-order companies and junk shops. Now I listened to the dialtone until the off-hook alert sounded, then clicked the receiver down. I knew what I was doing. Everything that was happening now was on purpose. There are no sins as vile as those of willfulness.

I picked up the receiver again and began to make my call. I heard the trunks clacking, speaking to each other in their man-made, musical language, and then the other end began to ring.

*Tap. Eep. Kerchunk.* That was the phone company's ovation for a well-played song.

You could get in trouble all sorts of ways by messing with the telephone. The most common use for a blue box was this one, rerouting the billing circuit so a long-distance call was free. You could gain access to classified numbers in the government, or eavesdrop on personal

calls. Ronnie Burns even claimed he could busy out the national long-distance service in a matter of minutes, just from a single telephone. The possibilities for both crime and perversion were endless. But most of what we did was harmless, experiments and childish pranks, with the occasional low level scam. Nathan Garagiola had gotten into trouble by selling long-distance calls to fellow students at his university, for the king's ransom of a dollar a call. Again, this was all done by music. Hell, Nathan didn't even have a blue box then.

Maybe I should talk about Nathan's scheme first, since it illustrates what music could really do. Nathan Garagiola could whistle a telephone call. It was a wonderful skill, one possessed by no other soul in the world.

Imagine the studio of the University of Pennsylvania's student-run radio station, where an ant stood still by running counterclockwise along the label of a spinning record. Sometimes he rested on the spindle, a tiny confused weathervane, before climbing back onto his circular treadmill. That little guy was going nowhere fast! He drifted on a tootling horn until the drums broke and he was overtaken by a wish that could only be fulfilled with a shaky crawl off the safety of the label and into the unknown beyond. But think about it: the further out the ant went, past the runoff groove and into the spiraling song, the faster he had to run just to stay in the same place, since the edges of a record move faster than the center, even though each point on the surface moves at 33 RPM (that's five and five-ninths of a revolution per leg!). It must have been exhausting, because before the final flourish of tom-toms, the ant gave up. He abandoned himself and shot around and around and around the turntable, at the mercy of a loop of paradiddles and



Nathan's own loose attention to the song's fadeout, and the needle slid a little closer with each turn.

What I'm saying is that the more difficult it is to pursue your dreams, the more dangerous it is to let them go!

This was back in 1968, when anybody who wanted a show on WXUP could get one, which meant that the studio had turned into a clubhouse for nerds, squares, freaks, Jews, Catholics, knee-deep yippies, fellow travelers, scholarship cases, virgins, mythology majors, logical positivists who divined their future paths by tossing yarrowstalks, the fat, the short, the gangly, obsessive, or medicated, those of us with myopia, speech impediments, or cratered acne, those of us who wore dental headgear to bed, those of us who called home every night, those of us whose families were as scattered as dandelion seeds, and those of us who loved something, anything, too much, and held it close enough to suffocate it. While on the air, WXUP's DJs and engineers were left alone in the studio to guzzle Frank's Black Cherry Wishniak and ride frequencies like matinee cowboys, resting sweating soda bottles right on the edge of the mixing board and substituting any radio tuned to 88-point-five FM for our own bodies. Nathan Garagiola kept the studio dark during his hour so the sound could live in its natural habitat.

The side ended and Mickey switched out the spent record for the next one in the stack, bloating the speaker cone when he dropped the needle. Nathan had packed his Abbott's milk crate with records in the order he wanted them played, which meant that Mickey's nominal role as studio engineer was more akin to the metal arm that selected 45s on a jukebox. Nathan wasn't blind then. Not all the way. Not yet. He could make out colors and shapes fine, and in good light

he could press his nose so close to the page that he could smell the binding glue and read well enough to keep up with his coursework as long he wore his glasses, the ones that made his eyes bulge like he was astonished by everything. He'd taught himself to recognize voices better than most people recognized faces, knowing Mickey in a crowd by his piccolo giggle, or Rachel Ramos, who had the show after his, by her dented-trumpet drawl. It wouldn't be the end of the world when the uveitis finally pulled the shade all the way shut over his left eye, the good one, his right eye replaced with what his optometrist called an "ocular prosthesis." The real bummer was the dripping clump of soapy hair that clogged the shower drain each morning, and it was no picnic being husky either, although that was more due to the judgment of the trim and unempathetic.

The ant fell off when Mickey put the record back in its sleeve, landing upside down in the thicket of crumbly, matted shag. In the new world thrust upon him, the ant righted himself and tried to make do. It's a hard life for all of us!

Mickey Deutsch was the only person Nathan had ever met who would listen to (encourage, even!) his endless talk of American Telephone & Telegraph's tandems and crossbars, about how wonderful it was that the phone company had created a system that was triggered by sound, about the tiny gaps in this system where the pieces didn't quite fit flush, imperfections which made it even better. Nathan must have recounted every discovery he'd made since he was a kid within the forever-expanding loom of wires and switching stations stretched across the country before he'd veered into talking about music—which (he claimed) was the same thing as telephones, really, since jazz musicians used songs to navigate the rules of

a system and then to find where those rules gave way, to speak the magic words that opened hidden doors. Mickey had first convinced Nathan to come to one of the radio station meetings only out of surprise and encouragement at the fact that Nathan had a second interest, though to Nathan, there was no difference between the two.

This afternoon, Mickey was fidgety, his leg twitching, his foot tapping on the carpet off-beat with the record.

“Hey,” he said. “You want to rub one out?”

Nathan shook his head. “How many times so far today?” he asked.

“Four,” Mickey said.

“Four,” Nathan repeated. “There must have been a hole in one.”

Mickey shrugged.

“You know,” Nathan said. “Like in golf.”

Mickey held up a green square. “I got this new book.”

“I can’t see the cover from there.”

“I know,” Mickey said. “That’s because there’s nothing on it. The ones with the blank covers, those are the ones you know are going to be good.” He leaned back in the studio’s recliner with his book and the scent of a million yellow cigarettes drifted up in a cloud from under his slacks when they rubbed against the torn plush. He swigged the dregs of his soda bottle and rubbed his crotch outside his pants while he read his shoplifted book aloud.

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## VITA

LIAM BARANAUSKAS

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### EDUCATION

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Thesis: Notes on Distance Dialing

B.A., Liberal Arts, The New School. May 2008

Concentration: Literature

### TEACHING EXPERIENCE

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Courses: Introduction to Creative Writing, Writing 101

Teaching Assistant 2012-2013

University of Mississippi

Courses: American Literature before the Civil War, American Literature after the Civil War

### HONORS AND FELLOWSHIPS

2015 Graduate Fellowship

2014 AWP Intro Award Nominee

2014 Matt Clark Editors Prize

2014 Best of the Net Nominee

Senior Editor, Yalobusha Review 2014-2015

Fiction Editor, Yalobusha Review 2013-2014

### PUBLICATIONS

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