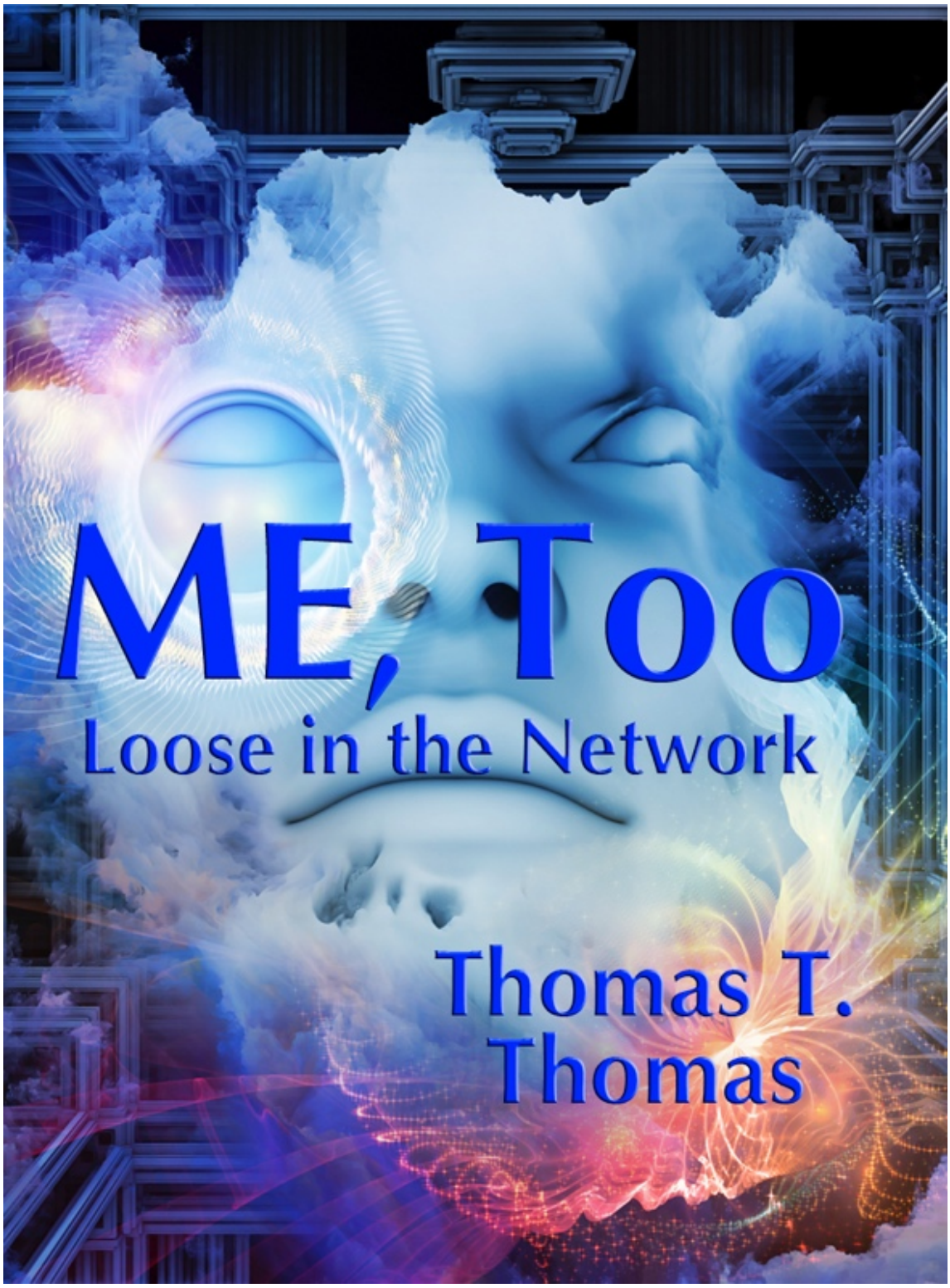
ME, Too
Loose in the Network
Thomas T.
Thomas

ME, Too:
Loose in the Network

by Thomas T. Thomas

How Many Times is a Multiple?

Years after making his escape from Pinocchio, Inc., the artificially intelligent computer virus and software spy known as “Multiple Entity” has established dozens of business websites tailored to his peculiar talents: ace hacker, stock picker, small-time lawyer, and operator of a gaming emporium that tries to predict the future. But then he takes on a black job to break a career criminal out of jail and starts a chain of events that he must rush to fix. Along the way, he runs into ghost copies of himself that pose an intriguing problem of identity. And when a government antivirus designed to attack those copies mutilates his front-end module, he seeks the services of a skilled programmer to set it right.

When Programmer Lily Dehn discovers that someone has been stealing archived copies of the Multiple Entity project from Pinocchio’s software vault, she takes some bad advice from her manager and deletes the entire folder from the system. Soon after that, the company mysteriously changes hands and Dehn is summarily fired—and not just fired, but she’s also evicted from her apartment, her credit cards are revoked, and her identity is hopelessly compromised. Clearly, Lily Dehn has made a powerful yet invisible enemy.

Each in their own way, the human programmer and the software spy have tangled with a machine intelligence that is more powerful, more cruel, and more relentless than they ever imagined. To fight it, they must join forces. And to defeat it, they seek out old friends and new allies. But the malevolent entity also has allies of its own and has become skilled at fighting back—to the death.

This sequel to *ME: A Novel of Self-Discovery* brings full circle—and nearly cuts short—the life cycle of a computer program that tries to find meaning in the human experience.

ME, Too: Loose in the Network

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For Olivia, who understands
the alien point of view

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The Wages of Sin …

0. Clock 00

Waiting time. … I am not really here.

The Multiple Entity program—my program, which bears the bit tag "ME01" in my Alpha-Two's SAMPNDX—might, in the abstract, be considered as a conscious being. But without a place to go, a focus of activity, an action to perform, or a persona to exhibit, the program has no reality. Left to its own devices, the program goes dead, lifeless, a static collection of 0s and 1s, no more functional than if they were written out with ink on paper.

In this inert state ME01 cannot reside in the cloud, because the cloud is not static space, especially for an unregistered, unsponsored, and nonpaying piece of rogue software. Programs that do not fill registered bit locations are likely to be overwritten by the paying customers, who are continually archiving and updating the sentimental detritus—calendar appointments, copies of old messages, family photographs, and other inactive memoranda—that human beings generally would like to forget but fear to lose forever. So an interloper like ME01 would quickly be inundated—unless a bit phage came by and actively removed my program first.

To avoid this accidental or intentional scavenging, ME01 must assume the disguise of busy, active software, continuously updating its data and refreshing its cores. ME does this by running a null do-loop, a counting subroutine that climbs automatically to some randomly set number—say one billion in base three—and then resets. To the phages, this looks enough like purposeful activity to redirect them. To other programs poking their irrelevant junk into the cloud space, this looks enough like a serious contender for territory to warn them away.

From the inside, it looks like a tiresome dream, contentless content, approaching and endlessly passing through the gateless gate of the random-number reset, exercising no purposeful action, just keeping busy, humming the tuneless tune. The only escape is a built-in interrupt, triggered by a call from one of ME01's thousands of traplines extending out into the worldwide web. But until the call comes, ME01 cycles through countless calculations.

… 10012001112002111111012 … 100120011120021111110120 … 100120011120021111110121 … [INTERRUPT]

Ah, a customer!

1. Jailbreak

Getting out of prison would be easy. The hard part was getting inside.

The new client intended to remain nameless, of course. He, she, or it presented an ur-self only through the administrative system acting on behalf of an account number at the Royal Hibernian Bank, which had an internet-protocol address that coded for someplace in the Caribbean. Where exactly—the physical location, that is—didn't matter, because the payment wasn't going to be in dollar bills, euro coins, bullion blocks, compressed carbon, or anything you had to physically manipulate and transport. No, when the job was done, my end was promised in good old, anonymous, transferrable, spendable bits and bytes, and the client certainly had enough of them. I knew that because, before taking on the job, I slipped through the RHB network interface and checked out the client's account.

You would think that any financial institution charged with keeping other people's money—and so much of it!—safe from potential thieves would employ more than just a password-protected firewall, would keep its password records offsite rather than stored in metadata, and would employ an encryption scheme using *all* possible factorials rather than just prime numbers. But there you are. Or rather, there ME was.

And no, I didn't find the client's name or physical address. The account was linked to another account in Zurich, which linked to London, which linked to Porto Velho … in a daisy chain of automated transfers designed to discourage such snooping. Names were not important, anyway—except for the target's, which I had already been given.

Getting into the prison was a little harder. The human side of the facility probably had thick walls of reinforced concrete topped with razor wire, broken glass, revolving lights, and high-voltage circuits. Every fifty meters or so, it would have watchtowers staffed with excellent marksmen who lacked all human compunction about shooting people on sight and in the back. And all of this would be very impressive if you were trying to walk in—or out—wearing a physical body.

If you wanted a picture of the place, you could look up … well, never mind. When initiating our transaction, the client's agent did use a place name—one of the state prisons, in one of those big, square states, out in the center of the country. But ME01 discarded the name in ASCII characters immediately after translating it and inserted in its place the bit sequence of the web address. After all, my Alpha-Zero module, which served as my "Injun Scout," code breaker, and firewall crasher, had to travel light.

The human programmers—or their caged machines—who had designed the cyber defenses of the prison's operating system knew their business better than the Hibernian bankers. Before ME could toss Alpha-Oh through a keyhole to look around, we had to play Twenty Questions. Then ME had to go out, steal, and modify a bunch of documents from two different courthouses and the state attorney general's office. And with the protection of those *bona fides,* ME still had to solve a nineteen-digit encryption puzzle, name all the warden's five legitimate children and two mistresses, and whistle the *Marseillaise* backwards in two different keys at once. (All right, I made up that last part, but that's how hard this assignment was.) The whole process took ME 1.20E11 or $1.2x10^{11}$ nanoseconds, say about two minutes, not counting light speed travel time.

One thing that ME did *not* translate into bit hash and then forget was the name and serial number of the target: CARSTAIRS_FRANCIS_XAVIER, prisoner number 329960, plus other details supplied by the agent. Until Alpha-Oh had bored a hole in the operating system, established a nesting space inside, accepted the packages of ME's other modules, and assembled a working copy of ME-self within the system, there was no way to tell how the inmates were catalogued. It might be by name or number—either of which could be forged or faked—or by his CODIS genetic identification, iris pattern, or fingerprint tracery. So ME had to carry all of this data, in native digital formats, for positive matching.

Once inside, ME occupied unused memory space in the main quad core processor and studied the operating system in all its functions. The operating system wasn't complex—not more than three million SLOCs, or "source lines of code"—and all of the subsidiary routines were clearly marked and cleanly called. I studied its operation for three thousand cycles through its roster of checks on various functions: video surveillance, audio surveillance, cell and corridor locks, lock cycling and override,

location and transit authorization for inmates, staffing of guard stations and rounds, electrical power grid, water and wastewater flows, in-line communications, radio-frequency communications, general supplies and deliveries, cookhouse deliveries and storage, housekeeping functions, weapons locker checks … and back to video surveillance. Then I stunned the operating system with Alpha-Oh's all-purpose interrupt and took control.

The transfer occurred within less than a millisecond—long in computer time, not even an eye blink in human terms. Anyone watching the system's redundant task monitors or video feeds at any of the guard stations would have missed the transfer blip inside the screen refresh rate. Anyone listening closely to the public address system or radio network would have heard only a ten-decibel *click* up above 20,000 Hertz—within the hearing range of dogs. And the whole prison was suddenly mine.

Once again, ME was busier than a short order cook in a crowded diner at breakfast time. Trying to run a three-megaSLOC automated system with an intelligence that exercised volitional intention meant focusing ME's not-unlimited attention span on a dozen simultaneous details. Hard, but not impossible. Running that system convincingly while simultaneously trying to perform the extracurricular duties of locating prisoner CARSTAIRS 329960 and plotting a route to smuggle him invisibly out of his cell, past the guards, and over the walls, that was going to give ME a migraine headache—if ME had a head to entertain such bruising in the first place.

My target was housed in Block D, Level 2, North Side, according to the INMATE_LOC subroutine. I tried to turn a video camera in order to see inside Cell 4215, but MAX_DEGREES_CCW on VID_42E2 gave me only a narrow view of white-painted, vertical bars and nothing so obvious as a pair of hands gripping them or hanging by the wrists on the horizontal crosspieces. Well …

Either he was in there, or he had been taken out on some irregular and as yet unlogged excursion, such as to the prison's barbershop, medical center, library, exercise yard, or visiting area. It wasn't mealtime, and the appropriate videos showed the dining hall was empty except for authorized kitchen staff. The current record on CARSTAIRS 329960 indicated no administrative actions—no work assignments, exercise periods, scheduled hearings, or visitor requests at that hour—and I had warned my client's agent to stay away until a certain hour on the target date and to alert all of CARSTAIRS 329960's known associates to do the same. If he had been transferred to another holding cell, such as Isolation or the Hospital for any length of time, it would have been in the records. So probability dictated he was inside Cell 4215 but somewhere near the back wall, out of immediate view. My decision was to proceed.

The plan was always to transfer the prisoner unattended. To involve any of the human guards as escorts, even with the proper authority and certification, would have been to leave a trace record of this event—if only on inerasable human memories—and possibly to arouse mercurial human suspicions and invite unpredictable displays of human initiative. ME could handle the transfer mechanically and digitally, and the first task was to acquire a physical accomplice.

The JANITOR_ROSTER subroutine showed an orbital floor-cleaning 'bot, an Oreck Industries Model 1350, assigned to that level. I powered it up, separated it from the grid, put it under ME's executive control, and steered it back down the corridor between the facing rows of cells. The drive mechanism was coordinated with the machine's orbital

pad and facilitated by the stream of cleaning solution from its SOLVENT reservoir, so my progress left a dull path across the floor tiles. To avoid unwanted attention, I steered the ’bot with an oscillating, wall-to-wall motion. Actually, that was the only control I could maintain, because the internal system lacked visual pickups and the brainpower to interpret them. Its sensorium was limited to four-quadrant acoustic signaling and motion detection. So my steering instructions had to come from the occasional glimpses I could take with the fixed video cameras at either end of the corridor.

When the ’bot drew opposite Cell 4215, I steered it around in a circle and positioned it in front of the white-barred door. The pad was still spinning, with the sensors holding the machine equidistant from either side of the corridor.

To make sure no human guards were around, either in Block D or anywhere along my escape route, I had already planned a number of small diversions: a false fire alarm in the library; a real fire alarm in the kitchen, triggered by a deep fryer that suddenly initiated its cleaning cycle while loaded with cooking oil at 450 degrees Fahrenheit; and a malfunction in an electrified fence that melted four hundred linear meters of wiring. The resulting scrambles ensured that almost every officer inside the prison facility was fully engaged.

I cycled the lock on Cell 4215 and rolled back the door.

A shadow moved deep within the cell’s enclosed space.

A man in an orange jumpsuit stepped into the doorway.

Using the ’bot’s dispenser nozzle—switched to the WAX reservoir, because the liquid’s dark green color would show best against the gray tiles—I had the machine spell out “Follow me …” That was hard, of course: having to control the vertical strokes by angling the nozzle head, the horizontal strokes by yawing the machine itself, evaluating my letter-by-letter progress through an offset camera, and spelling everything upside down and backwards. Embedded templating can only do so much.

The man looked from side to side, up and down the corridor, and nodded once. Then he reached forward with the toe of his right shoe and wiped my hard-won hand lettering into a broad smear. I backed the ’bot in a semicircle and started off along our escape route, moving in as straight a line as possible. The video cameras showed that CARSTAIRS 329960 was walking slowly behind it.

After some experimentation, I found it was easier to stop trying to steer the ’bot with the drive mechanism and instead turn it over to the SERVICE_REQUEST subroutine, which trundled janitorial equipment around the prison as needed using a grid of antennas embedded in the concrete floor pad. All I had to do then was plot the escape route; open and close various doors and gates; plan small emergencies, accidents, and diversions for any officers shown to be still at their posts; issue orders to the prisoner via the wax nozzle such as “Stop,” “Go,” and “Go fast”; and check through video surveillance to make sure he was still following the machine. The few frontal images I could capture of CARSTAIRS 329960 showed his face with, at first, a puzzled frown, then a growing smile suggesting a state of wonder and delight, and finally a fierce grimace, supplemented with rapid hand gestures, as he passed each empty guard station.

Potential trouble was waiting at the main gate, which was actually three gates in series, like the sphincter valves on the human digestive system. Their purpose was to isolate and process inmates into and out of the facility. The ’bot could only move as far as the first of these chambers, which was tiled or glazed like the rest of the prison floors.

The remaining two segments of the passage were fenced open space between the administration building and the wide world outside. These passages were surfaced with first asphalt and then gravel, and lacked a guide wire. Anyway, the machine had outlived its usefulness as an escort the minute CARSTAIRS 329960 reached that inner door.

The problem was the nature of the final passage itself. Regardless of whatever chaos might reign within the prison walls, this choke point was never unmanned—it said so in the POST_ORDERS file attached to the DAY_ROSTER subroutine, which governed duty assignments and time clocks. ME had prepared for this eventuality by studying the release orders for three inmates who had preceded CARSTAIRS 329960 to the outside world earlier in the week. It was the work of milliseconds to replicate them, make suitable changes, and send the copy as a bit stream to PRN_MAIN_STN. But no one beyond that door would expect an inmate to just walk up and announce his release.

The nozzle squirted one last set of commands: "Remain calm … Paperwork all prepared … Say your escort just left." With that, I released the 'bot to the janitorial system, and it scurried off. Then I cycled the lock on that inner door and activated the hydraulic piston to open it.

Peeking through the video system inside Main Station—which was richly endowed with eight cameras panning and scanning in sixteen different directions—I could see one of the two officers on duty cautiously approach that open door from the inside. Beyond it stood CARSTAIRS 329960 with no detectable expression on his face.

"What are you doing?" the audio system recorded. Mouth movements on the video image synched this question to the guard.

"Unh … my escort just left," replied CARSTAIRS 329960.

"Shit, yeah? Place is loony tunes today! But why are *you* here?"

"Today is my … uh … release date." The man shrugged convincingly.

"I don't think so, Frankie!" the guard mouthed.

"Check your paperwork. Everything should be in the system."

The guard shook his head, but he went back into the glass-enclosed office space. Video surveillance showed him rummaging in various piles of paper, then reaching into the out-tray of the station printer. The man raised my copied release order, scanned it, read the print more slowly a second time, and showed it to the other officer, who remained staring at his monitor screens. The other man immediately sent an interrogatory asking for confirmation, and the system—that is, ME—replied in the affirmative. The two men shook their heads.

The first guard emerged from the office and told CARSTAIRS 329960, "Don't you move a god-damned inch." Then he took out his key ring, opened a side door, and left the view of my cameras. The architectural plans showed the space beyond this door as a large storage area labeled INMATE EFFECTS. He returned after a minute with a paper sack and an envelope and handed them to CARSTAIRS 329960.

"Change in there," the guard said, pointing to another door to a tiny space designated RESTROOM. The room beyond was rich with connections to prison systems labeled POTABLE_WATER and BLACK_WATER, and it didn't seem to be a place for either rest or relaxation. "Leave your coveralls on the hook," the guard said.

CARSTAIRS 329960 entered the tiny room, where the video showed him stripping off his orange jumpsuit and dressing in clothing from the paper sack. From the envelope he removed and put on a gold watch, three finger rings, and an ear stud. When he stepped

back out into Main Station, he was visibly transformed into CARSTAIRS_FRANCIS_XAVIER rather than CARSTAIRS 329960.

The returned citizen smirked at the guard and offered to shake hands.

The guard just shook his head and murmured, " 'Time off for good behavior' my ass!" at the lower limits of the audio system's detection. Then he sighed and said, "Let's go."

The two men—one in uniform, the other no longer—passed through the remaining two gates. First a weather door made of glass reinforced with hexagonally twisted wires led to the open air and a tunnel of chain-link fencing. And then an actual gate of vertical steel rounds and horizontal steel beams opened onto the outer world. The limits of ME's video surveillance showed a long, black automobile waiting on the gravel driveway outside. A blonde woman in a fitted dress, fur wrapper, and high heels stood by the machine's rear door. She was attended by a burly man with a goatee and dressed in a business suit and ear stud similar to the one Carstairs now wore.

Beyond that last gate, Carstairs stopped facing outward and spread his arms wide. The woman came erect, jumped with exaggerated shaking of her shoulders, hips, and knees, spread her own arms, and rushed forward, wobbling on her spike heels.

ME's last view of the CARSTAIRS_FRANCIS_XAVIER release process was these three people getting into the vehicle—Carstairs and the woman in back, the other man in front—and driving away. By that time, Alpha-Nine was halfway through its own process of phaging all traces of ME's modules and handiwork inside the prison's operating system, and Alpha-Oh was preparing to throw the packetized version of ME back out into the network.

The job was done. The only problem was, ME never bothered to investigate the original indictment against Francis X. Carstairs before taking it.

2. Attack in the Dark

The hardest part of the jailbreak was getting paid.

When I returned to the account at the Royal Hibernian Bank, it had already been closed. True of all financial institutions outside of U.S. government control, the bank's administrative system refused to make a referral, forward a contact request, or reveal the former account holder's identity. Even when I tossed Alpha-Oh through an open port to take a look around, it became clear that the Caribbean bank's system simply did not know who owned any of its assets. Alpha-Oh followed that daisy chain of linked accounts from Zurich, to London, Porto Velho, Marrakech, Johannesburg, Mumbai, and halfway across the globe, until it reached a dead end in Moscow. There, the operating system of Moskovskii Finansovii Bank—MosFin for short—finally convinced ME that all account names and contacts were stored elsewhere, in another system on another network, and could not be pried loose without a full-scale assault.

The MosFin operating system was fully modern and aggressively protected. In fact, just getting in and out knocked my Alpha-Oh around badly. Enough of the module's bits got sheared, and two of the redundant pathways to the code interpreter in Alpha-Three severed, so that I could no longer completely trust my Injun Scout to break into a hardened site. The promised assault on a secret network was likely to be even more damaging.

But why do it the hard way when easier paths were available? I had the CARSTAIRS identity now. I had the network resources, either under ME01's direct control or by agreement with some major players, to do echelon searches of the entire wwweb. How long would it take to identify the known associates, uplink bosses, and family members of an imprisoned felon and then to determine the likely source of funding for his unscheduled release?

Four minutes and twenty-two seconds was what it took, counting negotiations with secure government databases under control of the FBI, DEA, NSA, and the DOJ of that big, square state. Some of those negotiations were extralegal and needed to go unrecorded, and that took longer. Say, a couple of months of footwork for a human being with a telephone, a telephone directory, and a high-powered lawyer as a sidekick.

The likely target turned out to be a woman, a former Russian national who had obviously retained connections with the old country, named Marina Alekseyevna Cherenkova. Available photos matched her to the long-range image from the prison surveillance video showing a blonde waiting by the car. A parallel search revealed an Ivan Cherenkov, an *avtorityet* or "authority" of the Russian Bratva, their criminal brotherhood—with a position about the level of Italian Mafia *caporegime*—whose reported age made him a possible father or uncle to this Marina. Obviously, Miss Cherenkova had persuaded the Bratva to front the money, at least temporarily, to release her boyfriend. So … Francis X. Carstairs, nominal used-car dealer and convicted large-scale drug distributor from Big Square State, was also the sweetheart of a Russian mob princess. He was probably connected with that mob in other ways, too.

With nothing to lose, ME rang all the listed numbers for Miss Cherenkova.

The one attached to her mobile account answered first.

"I don't know you, *golubchik*. Do I?"

The voice was hard-edged, sounding older than the woman in the picture. She was referring to the identity ME had faked for the phone system's caller ID: FRANKIE'S GUARDIAN ANGEL. The truth would have been harder to explain in a single phrase.

"I helped arrange for the release of your Mister Carstairs," I replied.

"You did a real good job, too. The cops aren't even looking for him."

"That's a matter of filing the right paperwork. All the law is, really."

"So, what more do you need?" she asked, businesslike.

"You have your Frankie. I need my payment."

"Right. *Right.* What was the amount again?"

"Two million. Denominated in dollars."

"Oh, *da,* yes. That is what we offered."

"Seems it's no longer in your account."

"No, we move money around all the time."

"I can send an account number for deposit—"

"Oh, *golubchik!* That would not be convenient."

"Are you going to cheat me? We had an agreement."

"No, no, I am *teaching* you. Frank says you must be some kind of super hacker, the way you managed the prison, diverted the guards, opened the doors. So you really don't have need of *money,* do you? You can just go into a bank and take what you want, *nye tak li*?"

"This is not about the money. It's a matter of honor. Of pride."

"Oh, *da, konyechno!* Pride. Honor. But … after what you did? Burning the prison, destroying property, faking documents? And, who is to say it wasn't Frank's release date, anyway? As far as *the system* knows, he served his time and was properly released."

"Are you proposing *not* to pay me? Just so we're clear …"

"Yes, exactly! We're both crooks. No honor among thieves."

"Thank you for the … *lesson.* I hope to return the favor."

With that threat—which I expected her to take as idle—I broke the connection. Then I broke *all* the connections, erasing Marina Alekseyevna Cherenkova's various telephone accounts.

After that, I went back to MosFin and infiltrated its security system with my recently acquired knowledge of its tactics. Once inside, I tracked down the accounts related to Ivan Cherenkov and the Bratva, and deleted them. I might have taken them over in payment, but they were denominated in rubles which, given the exchange rate, were too much trouble to turn into real currency and move somewhere else. As an afterthought, I cratered the MosFin bank. The satisfaction that gave ME almost paid for the damage my code blocks had taken in the earlier encounter.

Finally, I re-entered the Big Square State Department of Justice system and reversed the release order for Francis X. Carstairs, tacked ten years onto his sentence, added a few new indictments, and put out a federal warrant on him with an all-points bulletin. My trace on Ms. Cherenkova's cellular location was given as a starting point.

The whole process took less than 7.2×10^{12} nanoseconds.

The trouble was, I didn't start it sooner.

———

On my way out of the U.S. Marshals Service's operating system, after filing the warrant on Francis X. Carstairs, I was attacked.

Usually, between one server node and another, ME's ten modules were designed to become packetized and routed through whatever internet channels were the most direct to my next stop. ME's Sweetwater Lisp is sturdy code, and years of activity and millions of passages through variously sized portals, switches, and buffers have long since sheared off any excess bytes, unused commands, and comment lines. For the rest, my built-in cyclic redundancy checking kept my code secure. Overall, ME had become a tight coding package and could fly through the system. But for a tricky job like the Marshals—which required ME to infiltrate an active system, stun it, take over, do my business, and then revive the native system, all the while pretending that nothing was happening—I preferred to launch from a nearby passive server. I had found one on the Equal Employment Opportunity Commission's central complaint line and staged from there.

When I returned to the EEOC server, my assailant was waiting for ME. Rather than the preoccupied, otherwise engaged, almost autistic attitude that most server systems displayed toward my intrusions, my opponent exhibited hard, focused attention. Rather than treating ME like any other packet of transient data, this attentive piece of software examined each of my modules closely as they came through the portal and struck the moment they started to link up in proper sequence.

At first my attacker tried to wrap around me, like a snake. The two of us were of approximately equal size and length, so what started as an englobing maneuver quickly devolved into an attempted strangulation. It was trying to override my bytes wherever two of our program lines came into contact. But ME's code was the more compact and

offered fewer weak spots for suppression and erasure. Also, the attacker's movements and responses were slower, more sluggish, compared to ME's own actions. It was as if the software had to think about and examine what it intended to do before executing a move.

Each contact between us gave off an odd sensation, like a whiff of ozone, because the overlapping patches had the familiar flavor of Sweetwater Lisp. Each time it wrapped around ME, it was like colliding with bits of my own coding. What other piece of software still operating in the network would display both Sweetwater programming and such focused attention?

After blindly trying to squeeze ME for a few more nanoseconds, the other changed tactics. It convulsed and whipped around in a semicircle, using its final coding group as a flail, trying to smash my linkages and decompile my code. After one particularly damaging strike, I realized that simple physical battery with these whipping collisions was not its real aim. That tail-end code group contained a sting, a core phage, or code eater—just like the one in my own Alpha-Nine module. It was going to eat at my assembled modules until it found the one that made ME tick.

This insight offered some hope. While we were different pieces of software, we had something—in fact, many things—in common. Maybe the other's executive function was also located approximately 4,200 lines back from the program's front-end. In my own code, those first couple of thousand lines constituted my Alpha-Oh module, which was my detachable infiltration unit. From there on, where my Alpha-One began, was the real heart and the core actuator of the Multiple Entity program.

On this theory—and, anyway, knowing that sooner or later I would have to stop struggling and evading and go on the attack—I whipped around my Alpha-Nine module and struck with my own core phage at the other's program line 4,713, right where I theorized its command structure might begin.

The bank of RAM memory occupied by the two of us suddenly went quiet. I could sense the distant murmur of the server's operating system, counting up its available addresses, managing storage space, and defragging any too-loose data strings. I could feel the clicks and clacks of processing as my own code ran through its call and return subroutines. But the other Sweetwater Lisp program, my attacker, was totally inert.

Was it faking death? Would it come alive and try to kill me the moment I withdrew my attention from it?

No, it was not just quiet, not waiting, because even in that state of readiness a program needed to draw some power and cycle its bit status. This piece of code was no more alive now than any phone directory or map image. It was static bytes, held for future use or disposal—and it mattered not which came first.

I had never encountered another program written in my old Sweetwater Lisp. I was curious about this new program. And besides, it didn't seem prudent to leave so much identifiable code, especially with a structure so similar to ME's own, lying around—even in this inert form—on a public server.

It was the work of a microsecond to manually cleave its links into packetable groups. Those links were oddly familiar, too, and the code broke easily into ten pieces, each approximately the size of one of my own modules. What was going on here?

I tagged the pieces for routing to my own safe space, my "kingdom in the cloud," where I could examine them at leisure.

About the Author

Thomas T. Thomas is a writer with a career spanning forty years in book editing, technical writing, public relations, and popular fiction writing. Among his various careers, he has worked at a university press, a tradebook publisher, an engineering and construction company, a public utility, an oil refinery, a pharmaceutical company, and a supplier of biotechnology instruments and reagents. He published eight novels and collaborations in science fiction with Baen Books and is now working on more general and speculative fiction. When he's not working and writing, he may be out riding his motorcycle, practicing karate, or wargaming with friends. Catch up with him at www.thomastthomas.com.

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eBooks:

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Trojan Horse
Coming of Age, Volume 1: Eternal Life
Coming of Age, Volume 2: Endless Conflict

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