

Part Two

Game Online and Win Big

14

Where Do You Think You're Going?

Dire Straits, 1979. It's the next morning, and the school that was empty the night before is the opposite of empty now. Bright-eyed youth pace their way along well-scuffed corridors, a sea of lip gloss and hockey jackets passing banks of bright orange lockers in the downstairs halls.

A tangible adolescent energy hangs in the air, increasing in strength as each day clocks down inevitably toward the end of the year. I never noticed it last year like I notice it now. In the same way, I never noticed last year how that stunned look behind the glass of the portraits upstairs has already stealthily crept in behind the vacant smiles of the rest of this year's grad class.

Like those faces in yesteryear's portraits once were, we are the faces of the future. I suspect that the future has no idea how much trouble it's in.

Against one bank of bright orange lockers, you'll find the four of us. We're usually here an hour before the day officially starts, after which we rendezvous in conspiratorial fashion for five-minute meetings of the mind in the mobbed corridors between classes. On this particular morning, Mitchell and I are co-conjuring answers to yesterday's algebra homework, which as usual means that he explains the voodoo word problems I can't be bothered to understand, then I do the actual math that he copies back.

While we work, Rico is helping Breanne try to coerce a stack of well-worn automotive tech manuals to simultaneously all slump back into the bright orange locker that's hers, as a result of them spilling out when she opened it a minute before. Why anyone would choose bright orange as the color for a floor's worth of high school lockers is a question that's nagged at me since we all arrived at Ogden in tenth grade, but I'm no closer to an answer now than I was then. Another month and a half, then I can let the token angry intellectual in next year's tenth-grade class worry about it for the next three years in-

stead.

What the four of us, who used to be the five of us, do in the mornings is this. Somebody comes up with a topic, then we argue about it as we walk the hallways in an endless circle. Through the lounge, up the east stairs, along past the library and the office, down the west stairs beyond the science classrooms, back to the lounge, and so on. Politics, current events, music, sports only if it's something we all feel comfortable making fun of. And gaming stuff. Lots and lots and lots of gaming stuff.

Gamers are all different. However, the four of us, who used to be the five of us, are a particular type of gamer who obsesses endlessly over the details of the alternate worlds in which the games take place. Our own games tend to polarize around dystopian dark fantasy and quasireal-tech science fiction, which means that all of us have an unhealthy interest in electronics, and in networking, and in trends in crypto-fascist politics, and conflict history, and the ancient world, the evolution of consciousness, military hardware and munitions, natural disasters, human-made disasters, Sun Tzu and Jared Diamond, media culture and Joseph Campbell and why rogue prions will eventually destroy all life on earth. The meaning of life, the end of the world. That kind of stuff.

The four of us, who used to be the five of us, don't often run out of things to talk about. However, we're aware that we all run the risk of ending up on an international-intelligence watch list if the wrong people ever overhear us.

This is Breanne's morning, and she usually plays it safer than the rest of us. She's still thinking hard as Mitchell and I crib the last of each other's work and we all drift with the crowd.

"Okay," she says, snapping her fingers. "TV journalists who should be drafted into politics whether they want to be or not. Rachel Maddow."

"Charlie Rose," says Mitchell.

"Christi Paul," says Rico.

Breanne slaps him upside the back of the head. "Excuse me?"

"She's great." Rico manages to catch her hand on the backswing.

"Because she's got the edge in the doe-eyed blonde department?"

"She's sharp as a tack."

"She's from, like, Ohio."

“She left Ohio, proving my point.” To Mitchell, with a hint of skepticism — “Charlie Rose?”

“He gets to sit in a dark room talking existential politiculture with a captive intellectual elite. If he goes into politics, I’ve got a shot at his old job.”

My turn. “Mass media exists to preach the consumer agenda of the corporate state.” Around me, a familiar groan rises in three-part harmony. “But clearly that’s what you all deserve.”

We make it two hotly contested rounds of the halls before the other three concede that the TV networks have all been infiltrated by elements of the domestic black-ops infrastructure for years. Or at least they stop arguing about it while Breanne stops for water. I take a moment to casually deface the *Picked Up Your Yearbook?* poster across the corridor from the downstairs water fountain. It says *Picked Up Your Yearbook?* when I’m done.

It’s a comment on trying to turn memory and nostalgia into an agonized longing that you package and buy. Nobody’s going to get it.

“We finishing up the firefight today?” I ask.

“This airlock thing needs discussion,” Mitchell says.

“Well, let’s do it now.” As I break off from the three of them to head for the central stairs, I give Mitchell a large wave goodbye.

“Are you on double daylight saving time for some reason?”

“I’ve got an eight-thirty with Kirk,” I say.

“Oh, god, it’s Kirk day?” Breanne’s voice suggests stark terror as the three of them continue on without me.

“I like Kirk,” Mitchell says.

“Keep that quiet at your sanity hearing.”

“No, really. I think we’re starting to bond.”

I’ve already slipped past the conversation, pushing up the stairs behind a tight knot of eleventh-grade divas whose look suggests that Pharmasave’s been running a heavy sale on mascara.

As I reach the corridor across from the office, I slow suddenly. I stare.

Passing three strides in front of me, Molly walks alone toward the library. Behind me, someone comes up short against my shoulder where I’ve stopped. I hear a murmured epithet, but one glare is enough to stifle the tenth-grader making it. He wears a rodeo club t-shirt that says *If you ain’t a cowboy, you ain’t [dung]*.

It's a contrapositive double negative, which means it's the same as saying *If you are [dumb], you are a cowboy.*

He doesn't get it.

When I look again, Molly's back is moving down the corridor. Her ponytail is in slow motion. I watch for a long while before I go.

15

Moving in Stereo

The Cars, 1978. In Kirk's office, Carl was listening.

I just listened to it all on audio, complete with transcription, but I'm still not sure where it came from. An open connection on the phone, or maybe the laptop Kirk sometimes types quietly at while you talk across from him.

Mr. Kirk is a particularly earnest guidance counselor who hates it when anyone calls him *Mister*. He sits behind a cluttered desk and a nameplate that just says *KIRK*, flipping through files like he's never exactly sure who's across from him. This morning, we're all in for scheduled *End of the year, are your university applications and grad transition packages up to date?* meetings. Kirk apparently uses exactly the same greeting for every single person he talks to, which I wouldn't have known if I hadn't heard it on the audio five separate times.

KIRK: *So, a month till finals. Down to the wire, graduation around the corner. How's everything going with you?*

Here are some highlights.

Like usual with Kirk, I'm in my element.

SCOTT: *We live in a world that's sliced up into shells of corporate conspiracy and CIA-financed sociopathy wrapping and overlapping each other like a planet-sized Russian doll, that's how the hell it's going. How's it going with you?*

Like usual with any passive listener, Mitchell is indefinable.

MITCHELL: *The whole post-secondary thing is a blind spot right now. But I think I'm leaning towards either quantum physics or Hawaiian shamanism,*

I'm not sure which.

Like usual with anyone trying to help her figure out her life, Breanne is apologetic.

BREANNE: *Well, like, I really, really wanted to try for engineering but I failed physics the three times. So I don't know.*

Not like usual, Rico is evasive. I don't know if Kirk heard it.

RICO: *Well, my mom and dad are still working way too hard. And my brother was supposed to take over things this year, but he's still mountain climbing in Patagonia or some stupid thing.*

SCOTT: *You make a conscious effort not to get corrupted is what you do. Mass media is a killer virus. TV, publishing, music, all of it. You consume anything that this culture has produced outside 1972 to 1981, you're sucking a subliminal content feed tied to a political hegemony that dates back to the Borgias.*

MITCHELL: *And I've been having a dream where I'm in the Australian outback, looking for this suicidal telepath so that I can convince her to transfer her cosmic power into me before she consumes herself in a sort of psychokinetic implosion.*

BREANNE: *Then I got the pass in algebra, I think pretty much only because I promised Mr. Stanislav I'd never do another math class. Which was really sweet of him, I thought.*

RICO: *I mean, hockey's good, but if the only reason any school wants me is because I can take a crosscheck, then I don't see the point.*

SCOTT: *No, you don't get it. 1972 to 1981 was this nightmare civilization's only golden age. June '72, the first Watergate arrests. The Nixon stranglehold guaranteed by the rigged elections in '68 gets its spine broken. The right-wing political-industrial complex goes on the run, then down for the count. Until March '81, when the Trilateral Commission stages Reagan the political proxy's mock assassination in order to preempt the real assassination that would have catalyzed a virtual coup d'etat by the Republican National Committee and put Alexander Haig into power. They had Nancy in*

their pocket. It was a walk.

MITCHELL: *And in the dream, she says that the physical quest for death is a catalyst for the overflowing psyche's spiritual release. Like we become as gods in our own right, then we crucify ourselves. Then she calls herself Louise. Do you think that means anything?*

BREANNE: *No, I think I do have ambitions, you know? I just need to really work on getting motivated to figure out what they are.*

RICO: *And I mean, the thing is, I like working with my dad. But people keep talking about college and scholarships and how they can't wait to get out on their own, and I'm just tired of feeling like I should apologize for getting along with my parents and wanting to be there for them. Because they don't have anybody else, you know?*

SCOTT: *Yeah, but you remember when Haig went live after Reagan took the bullet and announced he was in charge? And people had to remind him that actually, when the president gets shot, three other people get to take over before the secretary of state gets his turn? But what nobody knows is that Haig knew that Reagan, Bush, the speaker of the house, and the senate pro tempore were supposed to all be dead in separate hits by the NSA, the FBI, the DIA, and the NIC, all working against the CIA. Just think about it.*

Carl was listening to Molly, too.

Whatever was already going on, however long it had been happening, Molly was the most important part of it.

MOLLY: *No, it's fine. I mean, it's fine now. It was just a lot of things happening all at once. It's over.*

MOLLY: *Yeah, I read all the books. I reread the two that didn't suck so badly. It's not like some big mystery. Stuff happens, you deal with it. You roll with it or you roll under it. You make your choice.*

MOLLY: *Yeah, my grades slipped. Whatever. Now they're back up. It's high school. It's not like it means anything.*

MOLLY: *No, I need to go, actually. Thanks.*

On the audio, it's like you can hear the edge of an echo in Molly's voice. Some kind of hollow space inside her. You can hear her

backpack slam the desk as she stands, Kirk not saying anything like he knows there's no point. You can hear the door shut fast behind her as she goes.

16

Are You Receiving Me?

Golden Earring, 1973. It's pushing two o'clock, close to the end of Computers 12, second D block. In the computer lab, twenty-four other people are saving web page newsletter assignments that must incorporate rollover graphics, cascading style sheets, and browser-independent customized formatting for full marks. They've been working on them since last week, during which time I've been working instead on an animated video presentation titled *JFKKK — White Supremacists and the Kennedy Conspiracy*. Because that blows off the assignment criteria fairly badly, I have no idea whether I'll get a mark for it, but I don't much care at this point.

Mitchell is at the machine next to me. His *Rework Your Chakras In Twenty-Five Easy Steps* is coming along, but he's spending a fair bit of time glancing over at what I'm doing.

"I thought I heard that the Cubans killed Kennedy over the Bay of Pigs," he says at last.

"No. You thought you heard the CIA killed Kennedy over the Bay of Pigs and built Oswald into a Cuban-Soviet conspiracy."

"That's what I thought I heard?"

"Yeah. Only think instead about how the organized white supremacist movement's biggest fear in 1963 was that civil rights advances under Kennedy would lead to a de facto second civil war that they were likely to lose. I mean, the whole Oswald thing, they practically signed it." I open a Gmail window through a generic proxy server, letting me bypass the district firewall's webmail bandwidth cap so I can archive a copy of the day's work at home.

"How so? And why?"

"Political statement. Kennedy as the new Lincoln." As I send, Mitchell accidentally moves a folder he shouldn't have moved and his link structure explodes. I lean across to fix it for him. "John Wilkes Booth shot Lincoln in a theatre and hid out in a warehouse, so they set it up to look like Oswald shot from a warehouse and hid out in a

theatre. It's a masterpiece."

When I come back to my browser, my data's been sent but I've got a new email waiting in my inbox.

GAME ONLINE AND WIN BIG!!!

"Game online and [anglo-saxon] off," I mutter quietly. Where Mr. Davidson is hovering across the room, he gives me a look like I wasn't quiet enough. Mr. Davidson is the tweed-jacketed math teacher who I have for computers and geometry this year. I like him, if for no other reason than he seems to dislike this crop of grads almost as much as I do. I trash the message as I shut the window down. I make a mental note to rebuild my email server scripts from scratch when I get home.

"No," Mitchell says. "I mean why such a lame cover story? Nobody bought Oswald even then."

"Because a cover that inane attracts a fringe element that distracts from the search for real truth. People saying Marilyn Monroe shot from the grassy knoll. All that crowd."

"The lunatic fringe giving the semi-lunatic fringe a bad name?"

"Just think about it."

In the hall outside, the sound of movement and rising voices tells us that class is done. Mr. Davidson reminds everyone to email him their updated knowledge maps for next class, even as the mad dash starts for the doors.

"Odd," Mitchell says.

"The lunatic fringe is odd by definition. If they weren't, they'd just be a normal fringe."

"No, I mean it's odd that I don't remember my email already being open."

Where I pause from logging out to look over, Mitchell is sending his assignment in a Hotmail window that has one new message in it.

GAME ONLINE AND WIN BIG!!!

I probably should have felt something. I should have sensed a cold chill running up my spine, or had some sense of apprehensive

dread, but I didn't. Looking back, a paranoid person should have twigged to the idea that whoever was spamming me was noting my response in real time, then trying to end-run around my disinterest via Mitchell's willingness to read whatever shows up in his inbox.

Like I said, though, I'm not paranoid.

"Hey, check this out."

"It's bogus," I say. "I got one yesterday."

"Mother of a meltdown! Fifty grand for first prize..." Mitchell keys on a web address at the bottom of the message.

www.vindicator.org

A new page fires up in his browser, a lame logo and a block of text.

"The Vindicator Gameworks Project," he reads. "A nonprofit organization studying educational, cultural, and media philosophies in simulation roleplaying. Dude, the Charlie Rose gig just sunk to second place."

Mitchell notices that the class is clearing. He quickly packs up his stuff as he saves and logs out. I open my browser again, keying up *Vindicator.org* and seeing the same two-dollar-a-month budget-host turnkey page. I see the same hook that caught Mitchell's eye — a fifty thousand dollar cash prize. I ignore it as I tab into a traceroute page, mapping out the server's IP neighborhood so I can use it for willful damage later on.

I have to look up to see Mitchell lingering in the doorway. "English awaits," he says.

"I'll catch up with you."

He looks like he wants to say something but doesn't. Just shrugs as he goes.

I'm not watching, distracted as I run a tracking script and a WHOIS lookup on the domain. Through Connor, I know a guy in Buenos Aires who likes to benchmark denial-of-service worms, and I'm thinking I've just found his next test-bed site.

Because I'm distracted, I'm not watching as someone slips in at the door. With me out of sight in the corner, it looks like the room is empty.

Molly stops short when she finally sees me, three strides away.

She's got her backpack and jacket on like she's on her way out. A very, very long silence ensues.

Before things went strange between us, Molly and I had four classes together this year. One of those is English, which hasn't seen much of me lately. One of those was bio, which I dropped in March. The last four months in algebra and history have involved a lot of very long silences.

"Hi," I say finally, with a lot more effort than one word should take.

"I need to print," she says.

She turns away to pull out a chair along the opposite wall. Her back is to me as she logs in. I try to pretend to work for a minute, but there's nothing to do except stare at the Vindicator Gameworks Project logo, looking like it's been scanned off the back cover of a 1980 issue of *Omni*.

"Hey, do you still review for Technology Vault?" I recognize my own voice before I realize I'm talking. I don't know why I say it. I recognize this as a bad sign, because I always know what I'm doing. I take great pride in the fact that most of what I say gets thought about for a long while first.

Across the room, a quick twist of tension threads Molly's shoulders. "No."

"You heard about anything called Vindicator?" I ask anyway. "Some kind of multiplayer thing, big money?"

"No." Her expression shows less than zero interest as she stands.

"Mitchell's been going on about it. I told him it's some scam marketing thing..."

"I think I said no."

Neither of us remembers until that moment that the printer is sitting directly behind me. Molly doesn't look at me as she steps past to wait for her pages. I don't look at her as she goes.

It Don't Matter

Loverboy, 1980. It's two hours later and the Vindicator Game-works project is back on the screen. Only it's Mitchell, Breanne, and Rico gathered around it now.

"The Vindicator," Mitchell reads. "Experimental all-terrain mobile combat unit. Cutting-edge fuel-cell power plant, advanced expert system control, top speed three hundred klicks. It's hidden in a par-amilitary base and it's our job to get it out."

Mitchell's into the main contest page now, having cheerfully given up his name and email address in order to get past the home page and guarantee a steady supply of spam from other niche marketers for the rest of his life. The new web page features a new image — a futuristic vehicle rotating through a full three-sixty display.

From where I'm dragging the table into place across the computer lab, it looks like some sort of massively overbuilt six-wheeled all-terrain vehicle, six meters long by three high. Angled lines and a wrap-around viewport of translucent polycarbonate give it a look like a Corvette and a Hummer had children. Antennas and weapons racks bristle from the top and sides, like somebody finally figured out that particular function on their 3D modeling system and then forgot how to turn it off. A large *M* is emblazoned on the side panel, which doesn't make any sense to me if the tank is supposed to be called *Vindicator*. I don't care enough to get into it, though.

"Auto-fire rounds hit behind you," I call out. "Four distinct patterns."

"It's a beta of an online simulation system," Mitchell says, not listening along with the rest of them. "A hyper-real character-based environment. Custom browser setup for a broadband connection and five networked machines."

"So what's the catch?" Breanne is arrowing through the demo overview, a dizzying array of descriptive panes popping up. When Mitchell first showed them the home page, it turned out that she and

Rico had both gotten the same email already that morning. This has unfortunately given Mitchell additional incentive to evangelize.

“No catch. It’s got toll-free numbers to a bank and a lawyer in California. First team to crack the simulation cashes in.”

Rico leans in with interest as Breanne brings up weapons specs. “But what makes it such a big deal that they can hang fifty grand on it?”

I finish laying out battle maps. “Auto-fire rounds hit behind you,” I say, a little louder.

“No instructions,” Mitchell says. “You make the game. When you first go in, you’re looking to define the parameters that allow you to play. Work back paradigmatically from the controls to the gestalt of the game itself.”

“You’re using big words again,” Breanne says.

“Auto-fire rounds. Behind you. They hit.” I’m trying hard not to shout now from behind the evening’s charts and a carefully arranged matrix of dice.

“Teams of five. Systems, weapons, ops, engineering, and piloting.”

“The [lord’s name in vain] airlock opens, for [anglo-saxon’s] sake.” From the half-open door to the hallway, Wes the night custodian gives me a friendly nod where he and his broom slide by.

“Except we’re a team of four,” Rico says.

“We’ll figure something out. We’re a well-oiled tactical machine.” Mitchell spreads out a half-drawn diagram showing how he wants to set the fifth terminal up between us, letting us each switch off on it as needed. Breanne spills Snapple on it as she stares thoughtfully.

“It seems like there should be a catch...”

“The catch is you’re doing unpaid R&D work for some gaming studio sweatshop,” I say.

Breanne looks up like she’s just noticed I’m there. “All agreed, then. Let’s play.”

“I’m in,” Rico says.

“And me,” Mitchell says.

“Hey, did you all suffer botched brain surgery at some point or are your parents related?”

“Hey back, [pleasurable but antisocial act],” Breanne says, “what is your damage, anyway?”

“Web gaming bites my balls.”

(I actually tried for a while to find brackets for that last bit, but nothing I tried sounded any less rude than what was actually said. Sorry.)

“Take it any way you can get it.” Breanne smiles sweetly. I glare. I’m up and pacing, moving behind the three of them where they sit glued to the screen.

“Look, have any of you heard of this thing before now? Seen anybody talking in the gaming forums, any word on the review sites? That kind of cash profile, you should be hearing about nothing else. It’s a scam.”

“Or,” Mitchell says, “maybe it’s just really beta. So that someone should try to get a jump on the competition before there is any competition.”

“No.”

“Would it kill you to pretend you’re not the only person in the world once in a while?” Breanne says. I’m angling for a retort but Mitchell beats me to it.

“Give it an hour?”

All three of them are watching me in a particularly annoying way. Reminding me that even as irritated as we all constantly make each other, we don’t really fight all that much.

Try to imagine this as video. Imagine a jump cut here at the moment of charged decision where everybody’s waiting for me. Jump cuts in books would be a good idea, I think.

Instead of the computer lab, a transcript of the dialogue you’ve just heard in the computer lab flashes past in real time. There’s no light except the LED gleam of a workstation screen, because Carl doesn’t need light to see by. Carl’s just listening.

SCOTT: *One hour.*

MITCHELL: *One hour.*

SCOTT: *When we’re done, we finish the firefight.*

MITCHELL: *Noted and agreed.*

SCOTT: *One hour.*

RICO: *Yes, already.*

SCOTT: *My music.*

BREANNE: *Oh, god...*

In the computer lab, we throw workstations around the room underneath the big sign that says *DO NOT MOVE WORKSTATIONS*. We've got four systems set in a semicircle so we can see each other, with a fifth set off between them that anyone can reach if we lean.

In the other place, the darkness is cut by the flare of white light. Five monitors come to life across the interior of what looks like a small, cluttered room. Shadow cloaks irregular walls, the first monitor centered between the others where everything we say floods past in a perfect text echo.

In front of the five monitors that have just come to life, five jump seats are barely visible. No one's in them, the confined space around them empty. On the five monitors, the Vindicator Game-works Project logo unfolds at exactly the same moment it appears on each of the five workstations in the computer lab. As each of us clicks into the simulation page, the six-wheeled hyper-ATV comes into view, rotating slowly as it waits for us to log in.

18

Stop This Game

Cheap Trick, 1980. There are only about a half-dozen ways to describe four people playing a computer game, and none of them are particularly interesting.

I'll try to make this painless.

On all five monitors, a text-graphics framework loads at blinding speed, a scrolling description flowing past high-res virtual-reality renderings. Staggered corridors make a three-hundred-and-sixty-degree panorama in a standard 3D-shooter setup. Nothing out of the ordinary. At least not until we try to check out the controls and realize that there are no controls. No actual commands in the interface. No text processor that anyone can see, no convenient drop-down menu, none of the obvious keyboard shortcuts.

We deal with it. It takes five minutes for the four of us to work out the keyboard shorthand that controls the display. Up, down, rotate view. From there, we work out the lethally arcane combination of keystrokes and modifiers that control game function. Inventory, shoot, reload, all that. It takes two minutes for Breanne to sprint for the library to steal a roll of masking tape and a stack of Post-it notes. Then for the next half-hour, command by command, piece by piece of figuring out how things work, we cover our keyboards and monitors with cryptic game-function shorthand.

When we finally inventory, we discover that none of us actually has any inventory. Rico takes that hardest, because he gets antsy whenever he's denied access to things that explode.

In the dark and empty computer station, the game images repeat in real time on all five monitors. Each view moves independently of the others, twisting in perfect synch with our attempts back in the computer lab to figure out where we are and what we're doing. Working back paradigmatically from the controls to the gestalt of the game itself. It's easier than it sounds.

What the monitors don't show is a network trace, snaking out from that darkened computer station to wrap around the school network like a tightly twisted noose.

(Confession. There's a fair bit of technical stuff wrapped up in what happened that night, but even after the fact, I'm barely qualified to explain it. I'll try to report it back in a way that makes sense from how I know and remember it. But as far technical accuracy goes, consider me one of those unreliable narrators that I've always heard are supposed to make books all edgy.)

If this were a movie, you'd see IP addresses and reverse domain names flashing past so you could tell what was happening. In reality, nothing marks the cascading series of connections that brings Carl along a very long and roundabout digital route into the computer lab. I've got video archives of the systems logs in front of me even as I write this, but what there is to see is mostly a whole lot of numbers that aren't that interesting even to me.

I can tell you what it means, though. It means that Carl was effectively running the entire data grid for this particular corner of the hinterland that the school network is a part of. The primary feeds, the phone company lines, the cable trunks, all of it. The school district firewall must have been compromised right from the first day of listening in, whenever that was. But that would have been like slicing whipped cream compared to the complexity of the network reengineering that went on while we played that night, never suspecting. Never seeing.

On one of the monitors in the darkened computer station, you can make out where I'm pushing the display controls to extremes, my cursor driving a sort of 3D joystick that flips the view in a dizzying spiral. From the headsets hanging on the back of each jump seat, you can hear us talking in the computer lab as our words scroll past in real time.

SCOTT: *These controls suck.*

BREANNE: *Give it a rest.*

MITCHELL: *Here's the plan. Everybody picks a door and we do a fifty-meter sweep. Let's see where we are.*

RICO: *Umm, my door appears to have a half-dozen surprised-looking people*

behind it, two of them packing shotguns.

MITCHELL: *So run in there.*

RICO: *And do what?*

MITCHELL: *Flail about madly.*

RICO: *Plan B. Move.*

Molly was in the library that night. I didn't hear about that until a couple of days ago, by which you can probably tell that it's yet another few days later as I write this.

Molly must have been heading out at about the same time we find ourselves virtually scattering ahead of a security detail, the corridor behind us in the simulation filled with the bark of shotguns firing crowd-control beanbag rounds. She told me she thought she saw something funny as she slipped past the office for the alarm panel at the main doors.

From the corner of her eye, just for a second, the phone line lights are on at the front-desk switchboard. Everything's lit up like the proverbial Christmas tree, cycling through a storm of signal connections. But when she glances back, it's gone. Everything's dark through the glass of the locked doors as she stares for a moment, then turns away.

19

In the Heat of the Night

Pat Benatar, 1979. The surveillance feed is a four-part split screen, the crescent moon up in one corner, bright above the mine site where the scar of rough road fades into dark forest. There's no sound where the wind whips past a *CONDEMNED* sign rattling against a long fence of razor wire. Beyond it, a figure paces by in fatigues and night-vision goggles, M4 carbine rifle at his side.

In two other corners of the feed, you can see what look like silent vehicle bays. One is lit up with the glow of halogen floods, five choppers casting deep shadows where they're parked on skid pads. The other bay is as dark as the first is bright, showing the vague shapes of vehicles standing in shadow that climbs to the ceiling high above.

In the fourth pane, a windowless ops room is seen. Workstations line two walls, high-end flatscreen displays dark on the others. At center, twenty-odd people sit around a cluttered stainless steel conference table. Karya's there, and Malkov sitting across from her with his feet up and a black laptop in front of him. The remains of a half-dozen gourmet heat-and-serve pizzas are spread across the table, beverage cans piled high in a recycling bin by the door. There's no sign of the business garb seen in the chopper the previous night, everybody presenting a consistent display of well-worn fatigues and army-spec t-shirts. Still, everything seems kind of casual. Or at least it would if this view didn't have an audio feed.

"Item eleven." Lincoln is talking where he sits at the head of the table, reading from a two-screened hinged tablet that looks a lot more sophisticated than anything I've ever seen previewed on Slashdot. "The MM38 Exocet battery which came into our possession from the Tatmadaw in Myanmar is on its way to the KNLA in Myanmar, thus maintaining the moral balance in the area. Mr. Greggs and Ms. Lee are escorting it to a flight out of Manila, where it'll be traveling as medical supplies."

If you watch him, Malkov is only half-listening. On a battered Toughbook embossed with the crossed-swords-and-cluster-bomb icon of the Russian army, he flips through a half-dozen network diagnostic panes with practiced ease. Alongside the surveillance video of the room, I've got the matching real-time captures from his display. I watch what he saw then, a faint spike flaring on a network trace as he monitors a data feed.

"Item twelve. Intelligence in Sudan informs us of several high-ranking ex-SPLA officials who'll be seeking asylum shortly and will be needing transportation."

Malkov isn't listening as he slides his chair to the far wall, firing up a workstation as he patches his laptop into a network panel behind him.

Eighty-odd clicks away, in the simulation, we've managed to split up and break the squad pursuing us into two slightly more manageable groups. Then Rico and Breanne double back, and the four of us, unarmed, take out three shotgun-toting security ops with a fire extinguisher and a jury-rigged flash bomb of fluorescent tubes overloaded straight from a wall socket.

It's a nice piece of work. It's all sheer improvisation, looking for the one solution to the puzzle that whoever designed the scenario didn't think about. It's the sort of stuff that the four of us are good at when we play. But the fact that the simulation let us do it is far more impressive than our coming up with the plan in the first place.

Shooter simulations, as the name suggests, almost always have a limited palette of options for doing anything other than shooting. In the computer lab, we're too busy scrambling ahead of a security claxon to acknowledge it, but we all know we're playing something different this time.

We scoop the guns off the guards we've dropped, then continue the run-like-hell plan. Mitchell and I are alternating on the fifth console, clumsily helping the missing member of our virtual team keep up with the rest of us. All the while, the phone system and the network feed in the school office are being stripped down and remote rewired in a very particular way.

All the while, on the feed from Malkov's screen, a pattern recog-

nition system runs. Military-grade coding, no soft edges, all function. Some kind of monitoring system, data spilling past in a splintering of translucent panes.

On the security feed, Lincoln is finishing up. “Item eighteen,” he says. “We’re expecting a completion call to the Belgrade operation just wrapped up, with Mr. James taking point on the return.” Lincoln taps the tablet to darkness. In his expression, you can see the humorless smile again. “Our own Ms. Karya, originally scheduled to see things through to completion, will be lying low after the success of last week’s extraction earned her the number thirty-six spot on Interpol’s most wanted.”

Around the room is all raucous applause. Karya almost looks like she’s blushing, but the monochrome feed makes it hard to see.

“Item final,” Lincoln says, and there’s a subtle change in his voice that everyone else hears. “This has been a classified back-and-forth most of the past two years between only Mr. Malkov, myself, and a very small number of prospective clients. Meaning that most of you probably know more about what’s going on than I do.” A smattering of laughter from everyone except Malkov. “But I’m happy to report for the record that the news is good. We have a buyer for the Vindicator.”

It was supposed to be an hour.

There are no rules. Mitchell has a really convoluted way of explaining it that involves using the word *gestalt* a whole lot more. When it comes down to it, though, there are no rules.

The point of the Vindicator simulation from the time we start to play with it is to figure out the point of the Vindicator simulation. On the surface, it sounds straightforward enough. You play a team of five dropped into a paramilitary base with no weapons, no maps, no idea where you are or what you’re up against. You’re there to find an experimental weapons platform that you don’t know the location of, don’t know how to look for, and don’t know how to operate once you find it. You don’t know why you’re there, you don’t know who you’re working for, you don’t know the people who are shooting at you because they don’t want you there.

On our screens, the base is an intricate interlocking of identical

white corridors, well lit. The layout, the detail, the precision in the movement of the simulation carries a degree of realism that impresses even me. As we sprint into a storage area and seal the doors behind us, I vow to never say so out loud.

“That’s it,” Lincoln says, but even as the others rise around him, he catches Malkov’s eye. Something quick and wordless passes between them, like these are two people who don’t need a lot of talk to know when something’s going on.

“The uplink system flagged a proximity packet echo,” Malkov says, quietly enough that no one else hears. Behind Lincoln, the rest of the group is spilling out to those wide white corridors. “Give me an hour to lock it down.”

Lincoln nods as he goes, like that’s all he needs to hear.

It was supposed to be an hour.

Eight hours later, Malkov is still in the ops room, working alone.

Eight hours later, the computer lab floor is a minefield of pizza boxes and crumpled paper, the MacBook in my lap where I lay down a map grid to try to figure out how the various bits of the virtual complex lock together.

For the better part of a tense dinner break, we manage to get pinned down, until Rico pops a ceiling panel so I can do a quick re-wiring job that blows the fail-safes on the doors to shut them tight. Now we’re locked in, even as the troops gunning for us are locked out on the other side of the complex. Our workstation monitors are a kaleidoscope of shifting views, all of which are echoed by the monitors in the darkened computer station as they take down every word.

MITCHELL: *Frag the security scanners and head left. I said left.*

RICO: *This is left.*

MITCHELL: *No, my left. Inventory.*

BREANNE: *I’ve got a blue key card.*

SCOTT: *That’s off the squad leader we dropped in the intersection?*

BREANNE: *No, the tech in the lab who scrambled the [anglo-saxon] screamer grid.*

SCOTT: *Then he had security access. Slot the card, let me at the panel.*

Alongside the steady flow of the transcript, a coded data burst cycles. A steady flow of digits twists in and back on itself. On Malkov's laptop, the military monitoring app chews its way through the same signal, trying to pull some hint of content from its encrypted core.

In the computer lab, the four of us are slouched at our stations. All five monitors are showing some sort of windowless operations room, a stainless steel conference table scorched by the fire that got us into it. Workstations line two walls, high-end flatscreen displays dark on the others. The floor is littered with photorealistic energy-drink and pop cans that spilled from the recycling bin I upended when I came through the door, but we don't have a lot of time to admire the rendering. Mitchell and Rico are scrambling to scan beyond the doors before override security shuts the video feed down, like it has every other place we've tried to hole up ahead of pursuit.

"We've got security codes," I say. There's an edge of enthusiasm in my voice that I have to consciously dial down a notch. The virtual display shows the key panel where the blue card is slotted. "Pause it now."

"There's like five doors between them and us," Breanne says as she checks the printout of the most recent map. "We convince base security that we're them, we can make it ten doors."

"Pause it."

"We lost time working out the security protocols," Mitchell says. "We should make it up."

"Push on," Rico says.

"It's midnight," I say.

We share a communal moment in which everybody else blinks. They all glance to the time on their monitors, staring in mutual disbelief.

"Pause it."

Mitchell taps in the six-keystroke pause code we worked out over dinner, cycling the game's virtual display to shadow. A holding pat-

tern twists in. The Vindicator, rotating through all its three-hundred-and-sixty-degree splendor.

As I stand to stretch life into my legs, I'm more tired than I've been in a long while. An unfamiliar headache is starting at the base of my skull. The others look as weary as I feel. It takes a while for anyone to speak.

MITCHELL: *Back tomorrow?*

RICO: *Yeah.*

BREANNE: *Damn, yeah.*

They all look to me. My knuckles crack as I squeeze my hands out of their all-night keyboard curl. Breanne winces.

SCOTT: *Tomorrow.*

We put the computer lab back together with a lot less energy than we had taking it apart. The time being what it is, Rico tells Mitchell and I to throw our bikes in the back of the truck, he'll give everyone a ride home. I mumble something like *Thanks* as I collect our scattered notes, adding them to a stack of screen captures that have been spitting out of the printer all night.

At the multimedia workstation, I pop my iPhone and log out. For just a second, I catch a faint echo of feedback like the headset mic has been left on.

I never turned on the headset mic. But it's late and I'm tired. I don't think about it too much as we hit the lights and head out.

In the dark computer station with the empty jump seats, the monitors that displayed and transcribed the game as we played it blink off, one by one.

In the operations room, on the wall display mirroring his laptop screen, Malkov watches the signal shift. A new pattern replaces the old, the irregularity gone. He three-points an empty can of Red Bull across the room to the recycling bin, hitting it without looking. He stares at the screen for a long while before he finally shuts down.

20

Second Hand

Bachman-Turner Overdrive, 1974. It's the afternoon following the morning of the night before. Though my headache hasn't gone, it's faded to a dull pounding, which lets me ignore it like I ignore all the background noise that makes up so much of my life.

That morning, I get in early and head straight for the library, where I camp out at the study cubicle I like in the northwest corner. I like it because sitting at the window, you can see a narrow slice of forest and sky beyond the Agriculture 12 greenhouses, as opposed to seeing the roof and walls of the gym and the band room that are the only view from the rest of this side of the building.

That slice of sky this morning is grey, threatening rain. In front of me where I slouch comfortably, I've got the records of the previous night. I've got hardcopy screen shots. I've got my maps done up in Inkscape on the MacBook while we played. I've got Mitchell's hand-drawn sketches. I've got a binder full of notes I've been making since I got home a little after twelve-thirty, which resulted in another encounter with Seth that I don't remember well enough to write down.

I lose track of the time, tuned in just enough to listen for the regular rumble in the corridor that means classes are changing. When I hear the second such rumble, I start folding the array of paperwork in front of me into something like an ordered pile. My plan is to continue working in the lounge in advance of meeting up with the others at lunch, so that I can snag the corner table the four of us like before the cowboys get it.

But then I see a figure heading down the aisle toward me, watching me with a smiling gaze. Something twists in my gut because I know this smiling gaze.

Ms. Bond stops beside me and leans over the edge of the cubicle. Ms. Bond is my English teacher, last year and this year. Most of this year, anyway.

“Hello,” I say.

“Hello to you, too,” she says back. Ms. Bond seems younger than a teacher should be, which makes it easy to forget sometimes that she is a teacher. It’s not just that she looks young, because even the teachers who look young seem to carry a degree of permanent fatigue around with them throughout the year. It’s like there’s some sort of aging process that teachers have to go through in order to graduate with the education degree, but Ms. Bond managed to avoid it somehow.

“We missed you in class Monday,” she says good-naturedly.

“Yeah. Sorry.”

“Also, we missed you last Thursday. And Wednesday.”

“Yeah.”

“And Monday again. Then all of the week before that...”

“Sorry,” I say again. Not for the first time, I wish that my voice had more than one degree of inflection. My voice does attitude fairly well, but that’s about it. Some subdued deference would be nice once in a while. Maybe even a little humility.

“No worries,” Ms. Bond says. “I figured you were probably just hard at work on the final draft of that thesis essay. But then I remembered you never handed in a rough draft. Or an outline. Or a thesis statement. So I thought I might stop by to see how it was going.”

Outside, the rain that was threatening has started. As I stand, the wider view through the window shows the student parking lot overtaken by a light haze and the sound of revving engines. Two jocks appear to be starting an impromptu football scrimmage from the back of a shortbox pickup as it peels out. Though I couldn’t possibly care less, I find myself watching with the same intensity that I can feel where Ms. Bond watches me.

“So how’s it going, Scott?”

“Having some trouble picking a topic,” I say.

“How about the relative value of a high-school diploma in the modern job market?”

“How about the relative value of regurgitated public-school ideology in a post-industrial political vacuum?”

In my voice, the attitude sneaks in without my inviting it. Where I tear myself from the view outside and stuff the last of the paper-

work into my backpack, my attitude and Ms. Bond's smile undergo a kind of collision. She takes it in stride.

"You know, Mitchell told me some of the names you write under on that conspiracy website you work on. I liked your piece on how McKenzie King communing with his dead mother was a setup by the KGB. Print that and sign it. Give me a short story. Give me an essay, give me a book review, give me an ironic laundry list, Scott, and I can at least think about giving you fifty percent for the term."

"I'm late for class." I make a move to move. Ms. Bond is a head and a half shorter than I am, but she only needs to raise an arm in front of me to stop me dead.

"It's Day 3. English is actually the class you're about to skip right now."

I make a mental note that I need to pay more attention to the timetable. Around us, the last of the previous period's study-block brigade has cleared out, but I can see them still watching through the glass that fronts the library from the hallway, their sidelong snickering glances lingering.

"Scott, I know what this year's been like for you..."

"I'm late for something..."

"I know what it's been like for both of you, but that's not what this is about. You know it. You like to play at being philosophical, and that's fine. You want to pretend that your intentionally not graduating makes some kind of statement for intellectual freedom, great. But don't be surprised when that rigid frame of mind of yours gets bent out of shape by the real world."

"I'm a quick study."

"You're also short-sighted. With your vision, your instincts, your heart, you could go anywhere..."

"And you know anyplace on this planet looking for vision, book me a [lord's name in vain] flight."

Beneath the attitude, there's a real anger now. But I tell myself it doesn't get to come out. Not now, not this way. I look past Ms. Bond because I don't want to see her watching me. I just wait.

Even without watching, I can feel the tension that tells me she's got something else she wants to say. It doesn't get to come out either. She only shakes her head as she goes.

21

Someone's Looking at You

The Boomtown Rats, 1979. I don't go the lounge. I don't meet up with the others at lunch after all. From the library, I head straight for the computer lab and stick a most authorized-looking *Network Down — Tech Support Has Been Called* sign on the door to keep the rest of the day's classes out. I spend a minute logged in to the Vindicator site, just staring at the game splash screen where the hyper-ATV slowly spins. Then I get to work.

It takes about fifteen seconds to map the direct route from a domain name to whoever owns it. Vindicator.org's fixed IP address is easy. Name, address, and phone number are easy, even for people who pay extra to their registrar to try to keep that info hidden from the spam trawlers and the *You ordered toner from us, please remit so we can ship* scammers.

Anyone can do that. But for those of us who know where to go and how to search, it takes about fifteen minutes to get in deeper. Network traffic logs, server stats, email address directories, postings to the tech support forums, all of which are a lot less private than most people like to think.

An hour, maybe an hour and a half, gets you the real stuff. Business licenses, legal records, encrypted payment transactions. Public financial disclosures, bad credit history. The secret directories people set up on their websites to hide porn and share music and gaming PDFs with their friends.

I spend almost two hours, which is all of first A block, which is supposed to be English, plus lunch. I sift through registrar databases, server logs, gaming forums, and Usenet archives. I don't even get a name. Two hours of hard hunting, and the Vindicator Gameworks Project doesn't exist.

I'm not paranoid.

In the end, I've got what I started with. The two phone numbers to a bank and a lawyer's office that Mitchell mentioned, both of

which are legit. It takes another half-hour to confirm that the money promised for cracking the Vindicator challenge is real and is sitting in the escrow account where it's supposed to be. Beyond that, the Vindicator Gameworks Project lives only as an elaborate chain of domain registrations, incorporation documents, and oblique press release mission statements that all just point to each other in the end.

It's the usual sort of irrelevant information screen that normally obscures the real information from casual contact. In this case, though, there is no real information. There's the screen, and there's nothing else.

I'm not paranoid.

I spend another few minutes staring at the home page. *Educational, cultural, and media philosophies in simulation roleplaying*, it says. I use that as a starting point.

A half-hour later, I've cross-referenced the results from six different search engines parsing that phrase, and have pulled key contingent matches from them by hand. Meanwhile, the simulation interface that ran on our machines the night before is a web of customized Python code that's locked down tight. However, I find a single line of OS status-variable declaration comment in the custom code where a webpage frame sets up that interface.

Another set of searches lets me match the comment to an open-source code base. Then I cross-reference that code base with my original searches, coming up with a half-dozen samples of server code patches that I'm pretty sure have all been written by the same person who created the framework for the Vindicator simulation. I work through a search of every webpage I can find that references those patches.

A half-hour after that, I'm looking at the forums on a high-end Python programming board, where someone going by the handle *TomSwift* has worked on most of those patches at one time or another. The account has posts going back three years, including a lot of recent discussion around optimizing graphics routines in a real-time web-based simulation interface. The profile has an email address on an AT&T server. Another half-hour, and that address yields up a third phone number, with a Washington state area code and an exchange that a final search tells me is a mobile.

I call the number as the rising tide of movement outside and the

clock at 3:14 tells me school's done and the day is just getting started.

"Yeah?" a voice says after one ring. Outside, the corridors are a storm of feet and voices, but even over the noise, I can place something like a California accent in a hurry, the faint double-echo of a multi-networked connection.

"So why Vindicator?" I ask. "You trying to justify something? You feel guilty? Or maybe the question is, should you feel guilty?"

On the other end, there's a longish silence.

"You've got the wrong number," the voice says at last. "And how did you get it? And who are you?"

"On the first bit, long story," I say. "On the second bit, I'm a guy with the team that's going to have your cash in hand by the end of the night. I just wanted to say nice work. Also, I'm going to be looking for a job in about a month. I do a little coding myself, can I maybe send you..."

"Look, I don't know how you got hold of me, but I'm just the tech guy. You've got questions on the money, I can't..."

"The only question I've got is this. Do you know who you're working for?"

Another long silence. I'm back at my workstation, the multi-layered web of search screens dismissed as I pull up network diagnostics.

"I'm not sure what you mean..."

"What I mean is, instead of asking how I got this number, maybe you should ask why I had to get this number in the first place. I go looking for the Vindicator Gameworks Project and you know what I find? You. Everything else even remotely connected to this game is all double-blinds and dead-ends leading back to a home page and a lawyer's office."

"You ever consider that maybe it's just really beta?" the voice says, but I can hear a hint of uncertainty that wasn't there before.

"Yeah, or maybe somebody's being set up." I carefully shoulder-shoulder the iPhone as I type my way through a half-dozen router configuration pages. I want to play with the network before the others arrive, bypassing the district firewall so I can speed up our client-side response.

"I'm not paranoid," I say. "But think about the idea that maybe the point isn't anybody beating the game but somebody else watching

us try to beat the game. A double-blind experiment. Some mob of psych professors tracking down hapless high school students for kicks and pharmaceutical-industry research grants.”

Another jump cut. On the monitor where everything I say goes scrolling past as fast as I say it, a separate pane is in motion. A waveform display maps out the intricate spikes of a pitch-perfect speech synthesizer, playing back the words on the other end of the conversation.

It sounds like you've been thinking about this a while...

The synthetic California voice has a synthetic edge that's designed to suggest it's also been thinking.

SCOTT: *Just being philosophical. People say I like to play at being philosophical.*

On the other monitor, glowing brightly against the darkened space of jump seats and shadows, the tabbed array of search pages that I'd previously trashed is still showing, recorded and logged.

Okay...

The voice sounds perplexed now, pausing like it's trying to focus.

So what do you like?

My turn to get caught off guard. “What do I like about what?”

“You said *Nice work* on the game. What do you like about it?”

I only have to think for a moment. “I like the metaphor. I like the uncertainty. I like the idea that with no rules, the simulation becomes as much about us establishing our own rules as it does about us discovering the rules you laid down.”

That's cool. Hey, do you have a name?

I click off as Mitchell slips in from the stampede of students finally slowing in the hall. “Who are you talking to?”

“Nobody important.” I’m already dragging workstations into the same configuration as the night before. Mitchell tosses his backpack to a far corner with the echoing thud that only a stack of science textbooks can make. I can guess without looking that most aren’t for the courses he’s actually taking this year.

“Bond was asking after you in English.”

“Yeah, we talked.”

As I sit at the multimedia workstation, Mitchell’s watching me in a way that means I know what’s coming before he says it.

“Hey, if you want some help with this project, we could get together this weekend.”

“You’re not done?”

“Yeah, I wrote mine last weekend. I do my best work at the last minute. You, on the other hand...”

“You ready to play?” I don’t look at him as I fire up the workstations, one by one.

22

If You Want To Get To Heaven

Ozark Mountain Daredevils, 1973. It was mostly false bravado when I told the California voice on the other end of the phone that we'd be done the simulation that night. However, it took two solid nights of gaming for me to realize just how false. That night, and the next, we play.

The scene at home that week is a bit of blur. For the four of us, life starts at 3:14 p.m. when we hit the computer lab and step back inside the world that the game maps out for us. Hour by hour, meter by meter, we make our way through the virtual base.

Wednesday afternoon, we manage to map the upper levels and make it down to the levels below. The elevators have been locked down since the moment we were first spotted, so we end up rappelling down an empty shaft after encouraging the doors open with a forklift stolen from an adjacent supplies bunker.

Wednesday night we spend on the run, caught up in a tighter and tighter array of defenses. We run from assault troops with beanbag-round shotguns and tasers at the low end. We run from sonic cannons that'll drop you into a custom-made seizure at the high end. We run from a lot of equally nasty stuff in between.

For two nights, our array of maps and tactical schematics continues to spread out across the computer lab table like ripples on a pond. The base is a maze of corridors and tightly packed rooms on four levels, carefully laid out and annotated at one-to-five-hundred scale. However, it's the empty space at the center of the maze that's become the focus of all our attention.

Whoever's designed the virtual complex has done a good job of putting functionality first. There's a degree of ambient realism to the setting that makes it easy to get caught up in the idea that this is some kind of actual paramilitary base that people live in. As most shooter simulations are designed like a goth amusement park ride, this is a change of pace as nice as the game itself. All the corridors we've been

through, all the chambers we've passed through a few frenzied steps ahead of the patrols still closing in, all the security points we've ransacked in order to stay ahead of those patrols. Everything locks into everything else in a precision arrangement. No wasted space anywhere. Except for this one thing.

We've done the circuit of the complex four times, once for each level, and at the center of each of those levels is the same empty space. Some sort of secure core, locked off from the rest of the base. Problem is, we can't find any way to get from the rest of the simulation into this particular empty space. Every functional corridor we've followed, every realistic room we've torn through expecting to find some kind of concealed access to what lies beyond, there's nothing.

Second problem is, we can't find the Vindicator. Which suggests that the empty space at the center of the map is the only place it can be.

Over lunch on Thursday, we lock together a strategy for knocking out the sensor system base-wide, then letting someone cut through an inside wall. Whichever one of our avatars draws the short straw, we're hopeful that he or she makes it through to whatever's beyond without accidentally hacking through a hundred-amp service line.

Like it felt when the five of us won the VCON open, like it feels so often when we game, the four of us playing the Vindicator simulation have crossed over into a sort of zone where we start to think like one person. Mitchell said once that a band is the instrument that a song plays, or words to that effect, but I had no idea what he was talking about. I do now. In looking at the empty space at the heart of the maps, it's not like we debate so much as we finish each other's thoughts. We dispensed with small talk two days before. We're focused. We need to see this through to the end.

The computer lab is clear of classes in B block, so Thursday afternoon, we all cut to get started an hour early. The moment we log in, I juice base systems with a command core password we took off a squad sergeant the night before. We find the forklift we used previously where we left it, using it to make the first incision through the steel and concrete core of the wall. We finish up with hands and a pair of pipe wrenches found in a tool kit in one of the bathrooms. We've got our way in.

We work our way down through the inside of the wall, a pitch-black space so narrow that we need to squeeze without weapons, leaving them hanging around our necks. Breanne is rappelling down on point, because as in real life, she's somehow the skinniest of the five characters in the game.

From the moment we started playing, the monitors in the dark and empty computer station have been recording everything we do, everything we say.

BREANNE: *All right, I think I'm getting close to bottom.*

MITCHELL: *What do you see?*

BREANNE: *It's still too dark, hold on.*

Eighty-odd clicks away, the operations room is empty except for Malkov. He's working on his laptop, more diagnostics running. Like us, he's been here every afternoon this week. Packet info and network data is streaming past in seemingly random blocks. But from the chaos, a repeating pattern is flagged in red, Malkov watching it cycle, over and over again.

In the dark computer station, the same trace pattern from Malkov's screen plays out on a monitor console beside the running transcript.

RICCO: *Watch yourself.*

BREANNE: *I'm okay. I'm dropping again, hold tight.*

SCOTT: *My screen's going black to red.*

MITCHELL: *It's emergency safelight. When we shut down base systems, we must have crippled the power.*

RICCO: *Or they've shut it down trying to keep us in one place.*

SCOTT: *There's an opening.*

BREANNE: *[Anglo-saxon, but in a good way]...*

MITCHELL: *It's a vehicle bay. Everybody in.*

Where we've paused the game, my monitor shows the same visu-

al as Rico and Mitchell's, the vague shapes of vehicles standing in shadow that climbs to the ceiling high above. But on Breanne's monitor where we all watch, a green glow flares from the night-vision goggles she pulled off a sentry the session before.

In the monochrome haze, we can see the space split up into some sort of zoned storage. Lines of what look like artillery racks stand to one side, two rows of Humvees half-covered by white tarps in the far corner. Stacked crates look suspiciously like heavy ammo canisters. In the distant shadows beyond them is something that Rico swears is a partially disassembled F/A-18E. Rico has memorized *Jane's World's Aircraft* cover to cover, so I take his word for it.

At the center of the vehicle bay, in the jittery haze where Breanne's night vision pulls all the detail from the shadows, the Vindicator sits in photorealistic glory.

We don't waste any time getting close. Circling the tank is a line of portable lighting rigs and heavy equipment tool cabinets, like somebody's been doing repairs. A thick mass of cables runs from under the tank to the wall, some kind of power or data feed. A moment's fiddling by Mitchell brings the lights up so we can all see.

Every monitor shows a slightly different angle, the four of us spreading out in the simulation and looking from one monitor to the next in real life to get a panoramic view. Up close, the Vindicator has a coolness to it that's hard to describe. It's like one part stealth fighter, one part tank, and one part touring bus of a band you really like.

"What's the best card we've got?" Mitchell says. Hearing his voice reminds me that nobody's spoken for a while now.

Rico taps up an inventory on his screen. "Silver. That tech officer we surprised in the bathroom. Scott's got it."

On my monitor, I'm circling the Vindicator, its solid-core bullet-proof tires more than half my height. I tap my keyboard to flip in close to some sort of recessed key-card panel next to the big *M* on the Vindicator's side. I'm hoping it's a side entry portal, because there are no other obvious ways into the tank that any of us can see. The screen takes on an image of a key-card being slotted as I type in a command line.

On all our monitors, around the big *M*, a bead of light flares across the hull. The outline of a hatch slowly unseals, pushing out from the tank and rising on hydraulic lifts. I'm the first one in, clam-

bering up the struts of the virtual ladderway that unfolds from beneath the virtual door and drops to the virtual ground at my virtual feet.

In the game, we see five empty jump seats. Five workstations are visible within the confined space, set within staggered banks of controls and displays. Everything's dark.

In the other space with five empty jump seats, the monitors are alive, Malkov's waveforms flaring above the game consoles. On the screens that mirror our monitors in the computer lab, the interior of the Vindicator is a disjointed reflective view. Like one of those pictures that contains a picture of itself. Each console in the deserted station is echoed perfectly within the simulation.

MITCHELL: *Welcome aboard...*