

Cutscene

After I won Halliday's contest, I remained offline for nine straight days—a new personal record.

When I finally logged back in to my OASIS account, I was sitting in my new corner office on the top floor of the GSS skyscraper in downtown Columbus, Ohio, preparing to start my gig as one of the company's new owners. The other three were still scattered across the globe: Shoto had flown back home to Japan to take over operations at GSS's Hokkaido division. Aech was enjoying an extended vacation in Senegal, a country she'd dreamed of visiting her whole life, because her ancestors had come from there. And Samantha had flown back to Vancouver to pack up her belongings and say goodbye to her grandmother, Evelyn. She wasn't due to arrive here in Columbus for another four days, which seemed like an eternity. I needed to distract myself until our reunion, so I decided to log back in to the OASIS and try out a few more of the superuser abilities my avatar now possessed.

I climbed into my brand-new top-of-the-line OASIS immersion rig, a Habashaw OIR-9400, then put on my visor and haptic gloves and initiated the login sequence. My avatar reappeared where I'd last logged out, on the planet Chthonia, standing outside the gates of Castle Anorak. As I'd anticipated, there were thousands of other avatars already gathered there, all waiting patiently for me to make an appearance. According to the news-feed headlines, some of them had been camped out there all week—ever

since I'd resurrected them in the aftermath of our epic battle against the Sixers.

In my first official act as one of GSS's new owners, just a few hours after the fight ended, I'd authorized our admins to restore all the items, credits, and power levels those heroic users had lost, along with their avatars. I thought it was the least we could do to repay them for their help, and Samantha, Aech, and Shoto had agreed. It was the first decision we'd voted on as the company's new co-owners.

As soon as the avatars in my vicinity spotted me, they began to run in my direction, closing in on me from all sides at once. To avoid getting mobbed, I teleported inside the castle, into Anorak's study—a room in the highest tower that I alone could enter, thanks to the Robes of Anorak I now wore. The obsidian-black garment endowed my avatar with the godlike powers Halliday's own avatar had once possessed.

I glanced around the cluttered study. Here, just over a week ago, Anorak had declared me the winner of Halliday's contest and changed my life forever.

My eyes fell upon the painting of a black dragon that hung on the wall. Beneath it stood an ornate crystal pedestal with a jewel-encrusted chalice resting on top of it. And cradled within the chalice was the object I'd spent so many years searching for: Halliday's silver Easter egg.

I walked over to admire it, and that was when I noticed something strange—an inscription on the egg's otherwise pristine surface. One that definitely hadn't been there when I'd last seen it, nine days earlier.

No other avatars could enter this room. No one could've tampered with the egg. So there was only one way that inscription could've gotten there. Halliday himself must have programmed it to appear on the egg's surface. It could have appeared right after Anorak gave me his robes, and I'd just been too distracted to notice.

I bent down to read the inscription: *GSS—13th Floor—Vault #42-8675309.*

My pulse suddenly thudding in my ears, I immediately logged out of the OASIS and scrambled out of my rig. Then I bolted out of my new office, sprinted down the hall, and jumped into the first elevator to arrive. The half dozen GSS employees inside all avoided making direct eye contact. I could guess what all of them were thinking: *Meet the new boss, weird as the old boss.*

I gave them all a polite nod and pressed the “13” button. According to the interactive building directory on my phone, the thirteenth floor was where the GSS archives were located. Of *course* Halliday had put them there. In one of his favorite TV shows, *Max Headroom*, Network 23’s hidden research-and-development lab was located on the thirteenth floor. And *The Thirteenth Floor* was also the title of an old sci-fi film about virtual reality, released in 1999, right on the heels of both *The Matrix* and *eXistenZ*.

When I stepped off the elevator, the armed guards at the security station snapped to attention. As a formality, one of them scanned my retinas to verify my identity, then he led me past the security station and through a set of armored doors, into a maze of brightly lit corridors. Eventually we reached a large room, its walls lined with dozens of numbered doors, like extra-large safety-deposit boxes, each with a number stenciled on its front.

I thanked the guard and told him he could go as I scanned the doors. There it was: number 42. Another of Halliday’s jokes—according to one of his favorite novels, *The Hitchhiker’s Guide to the Galaxy*, the number 42 was the “Ultimate Answer to Life, the Universe, and Everything.”

I just stood there for a few seconds, reminding myself to breathe. Then I punched in the seven-digit combination from the egg’s inscription into the code pad beside the vault door: 8-6-7-5-3-0-9, a combination no self-respecting gunter would have trouble remembering. *Jenny, I’ve got your number. I need to make you mine. . . .*

The lock disengaged with a thud and the door swung open, revealing the vault’s cube-shaped interior—and a large silver egg sitting inside. It looked identical to the virtual egg on display in Anorak’s study, except this one had no inscription on its surface.

I wiped my sweaty palms on my thighs—I did *not* want to drop this—and removed the egg, then set it on a steel table in the center of the room. The bottom of the egg was weighted, so it wobbled slightly before standing perfectly upright—like a Weeble. (*Weebles wobble, but they don’t fall down.*) As I leaned in to examine the egg more closely, I spotted a small oval-shaped thumb scanner pad near the top, flush with its curved surface. When I pressed my thumb to it, the egg split in half and hinged open.

Inside it, resting in form-fitting blue velvet, was some sort of headset.

I lifted it out and turned it over in my hands. The device had a segmented central spine that appeared to stretch from a wearer’s forehead to the nape of their neck, with a row of ten C-shaped metal bands attached to

it. Each band was comprised of jointed, retractable segments, and each segment had a row of circular sensor pads on its underside. This made the whole sensor array adjustable, so that it could fit around heads of all shapes and sizes. A long fiber-optic cable stretched from the base of the headset, with a standard OASIS console plug at the end of it.

My heart had been thudding against my rib cage, but now it almost stopped. This had to be some sort of OASIS peripheral—one unlike any I'd ever seen before, and light-years more advanced.

A short electronic beep emanated from the egg and I glanced back over at it. A flash of red swept across my vision as a tiny retinal scanner verified my identity a second time. Then a small video monitor embedded in the egg's open lid turned itself on and the GSS logo appeared for a few seconds, before it was replaced by the withered face of James Donovan Halliday. Judging by his age and emaciated features, he'd made this video recording shortly before his death. But despite his condition, he hadn't used his OASIS avatar to record this message like he had with *Anorak's Invitation*. For some reason, he'd chosen to appear in the flesh this time, under the brutal, unforgiving light of reality.

"The device you now hold in your hands is an OASIS Neural Interface, or ONI." He pronounced it Oh-En-Eye. "It is the world's first fully functional noninvasive brain-computer interface. It allows an OASIS user to see, hear, smell, taste, and feel their avatar's virtual environment, via signals transmitted directly into their cerebral cortex. The headset's sensor array also monitors and interprets its wearer's brain activity, allowing them to control their OASIS avatar just as they do their physical body—simply by thinking about it."

"*No fucking way,*" I heard myself whisper.

"That's just for starters," Halliday said, as if he'd heard me. "An ONI headset can also be used to record its wearer's experiences in the real world. All sensory input received by their brain is digitized and stored as a .oni (dot-oh-en-eye) file on an external data drive attached to their headset. Once that file is uploaded to the OASIS, the entire experience can be played back and reexperienced by the person who recorded it, or by any other ONI user with whom they choose to share the file."

Halliday managed a thin smile.

"In other words, the ONI allows you to relive moments of other people's lives. To see the world through their eyes, hear it through their ears, smell

it through their nose, taste it with their tongue, and feel it through their skin.” Halliday gave the camera a matter-of-fact nod. “The ONI is the most powerful communication tool humans have ever invented. And I think it’s also probably the last one we will ever need to invent.” He tapped the center of his forehead. “Now we can plug right in to the old noodle.”

I heard the words, but I couldn’t process them. Was Halliday for real? Or had he been delusional when he made this recording, losing his grip on reality as he entered the final stages of his illness? The technology he was describing was still the stuff of science fiction. Yes, millions of physically disabled people used brain-computer interfaces every day, to see or hear or move paralyzed limbs. But these medical miracles could still only be achieved by cutting a hole in the patient’s skull and sticking implants and electrodes directly into their brain.

The concept of a brain-computer interface headset that allowed you to record, play back, and/or simulate a human being’s entire sensory experience had appeared in a bunch of Halliday’s favorite sci-fi novels, TV shows, and movies. There was SimStim—the fictional Simulated Stimulation technology William Gibson had envisioned in *Neuromancer*. And a similar form of experience-recording technology had also been featured in *Brainstorm* and *Strange Days*, two of Halliday’s favorite films . . .

If the ONI could do everything Halliday claimed, then he’d once again done the impossible. Through sheer force of will and brainpower, he’d once again turned science fiction into science fact, without much regard for the long-term consequences.

I also wondered about the name Halliday had chosen for his invention. I’d seen enough anime to know that *oni* was also a Japanese word for a giant horned demon from the pits of hell.

“The ONI’s software and documentation have already been emailed to your private OASIS account,” Halliday continued. “Along with complete schematics of the headset and the 3-D printer files necessary to fabricate more of them.”

Halliday paused and stared into the camera for a moment before continuing.

“Once you’ve tested the ONI yourself, I think you’ll realize—just as I did—that this invention has the power to drastically alter the nature of human existence. I think it could help humanity. But it could also make things even worse. It will all depend on the timing, I think. That’s why I’m

entrusting its fate to you, my heir. You must decide when—or if—the world is ready for this technology.”

His frail body shook with a coughing fit. Then he took a rasping breath and spoke one final time.

“Take all the time you need to decide,” he said. “And don’t let anyone rush you. Once Pandora’s box has been opened, there’s no closing it again. So . . . choose wisely.”

He gave the camera a small wave goodbye. Then the recording ended and a VIDEO FILE DELETED message appeared on the monitor just before it powered itself off.

I sat there for a long time. Could this be some sort of posthumous practical joke? Because the alternative didn’t seem to make any sense. If the ONI really could do everything he said it could, then it *would* be the most powerful communication tool ever invented. Why would he have kept it a secret? Why not just patent it and release it to the world?

I glanced back down at the headset in my hands. It had been locked away in this vault for the past eight years, waiting patiently for me to find it. And now that I had, there was really only one thing left for me to do.

I put the headset back inside the egg, then I turned around and carried it out of the archives, planning to walk back to the elevator at a calm, dignified pace. But my self-control evaporated in seconds, and I began to run as fast as my legs would carry me.

The employees I encountered as I hurried back upstairs were treated to the sight of their wild-eyed boss sprinting through the hallowed halls of Gregarious Simulation Systems, clutching a giant silver egg.



Back in my office, I locked the door, lowered the blinds, and sat down at my desktop computer to read over the ONI documentation Halliday had emailed me.

I was grateful that Samantha wasn’t there. I didn’t want to give her the opportunity to talk me out of testing the ONI. Because I was worried she might try to, and if she did, she would’ve succeeded. (I’d recently discovered that when you’re madly in love with someone they can persuade you to do pretty much anything.)

There was no way I could pass up such a historic opportunity. It would've been like passing up the chance to be the first person to walk on the moon. Besides, I wasn't worried about the ONI being dangerous. If using the headset was potentially harmful, Halliday would've warned me. After all, I'd just won the contest to become his sole heir. He wouldn't have wanted any harm to come to me.

That's what I kept telling myself as I plugged the ONI headset into my OASIS console and placed it gently on my head. Its telescoping bands retracted automatically, pressing the array of sensor and transmitter pads mounted on them firmly against the unique contours of my cranium. Then its metal joints tightened up and the whole spiderlike device locked itself onto my skull so that its pads couldn't be jostled or removed while the device was interfacing with my brain. According to the ONI documentation, forcibly removing the headset while it was in operation could severely damage the wearer's brain and/or leave them in a permanent coma. So the titanium-reinforced safety bands made certain this couldn't happen. I found this little detail comforting instead of unsettling. Riding in an automobile was risky, too, if you didn't wear your seatbelt . . .

The ONI documentation also noted that a sudden power loss to the headset could also cause potential harm to the wearer's brain, which was why it had an internal backup battery that could power the device long enough to complete an emergency logout sequence and safely awaken the wearer from the artificially induced sleeplike state it placed them in while the headset was in use.

So I had nothing to worry about. Nothing at all. Just a giant metal spider locked onto my skull, about to interface with my brain.

I lay down on the blue velvet couch in the corner of my office and made sure that my body was in a comfortable sleeping position, as per the instructions. Then I took a deep breath and powered everything on.

I felt a slight tingling sensation on my scalp. From reading the ONI documentation, I knew that the headset was performing a scan of my brain to map its unique geography. This scan would then be saved to my account so that it could be used to verify my identity in the future, in lieu of a retinal scan. A synthesized female voice prompted me to speak my passphrase. I recited it slowly, being careful to enunciate: *Everybody wants to rule the world.*

Once it was verified, a tiny augmented reality display extended from the front of the headset and then locked into place in front of my left eye, like a monocle. Several paragraphs of text appeared, floating in the air in front of me, superimposed in the center of my vision:

Warning! For safety reasons, the OASIS Neural Interface headset can only be used for a maximum of twelve consecutive hours at a time. When this limit has been reached, you will be logged out of your account automatically, and you will be unable to use your ONI headset again until twelve hours of downtime have elapsed. During this mandatory downtime you are still free to access the OASIS using conventional immersion hardware. Tampering with or disabling your ONI headset's built-in security safeguards to exceed the daily usage limits can result in Synaptic Overload Syndrome and permanent neural tissue trauma. Gregarious Simulation Systems will not be held responsible for any injuries caused by improper use of the OASIS Neural Interface.

I'd seen this safety warning in the headset's documentation, but I was surprised that Halliday had embedded it in the login sequence. It looked as though he'd already made all of the necessary preparations to release the ONI to the public over eight years ago. But he'd never actually done it. Instead, he'd taken the secret of the ONI's existence with him to the grave. And now I had inherited that secret.

I reread the warning a few times, working up my nerve. The part about permanent brain damage was unsettling, but it wasn't like I was being used as a guinea pig. According to the ONI documentation, GSS had already conducted a series of independent human safety trials on the ONI headset over a decade ago, and they'd all shown that using it was completely safe, as long as the user adhered to the twelve-hour daily usage limit. And the headset firmware's built-in safety features made sure they did. So, I reminded myself once again, I had absolutely nothing to worry about. . . .

I reached out and tapped the Agree button beneath the safety warning. The system finished logging me in and text flashed in the center of my field of vision:

Identity verification successful.
Welcome to the OASIS, Parzival!
Login Completed: 11:07:18 OST-1.25.2046

As the timestamp faded away, it was replaced by a short message, just three words long—the last thing I would see before I left the real world and entered the virtual one.

But they weren't the three words I was used to seeing. I—like every other ONI user to come—was greeted by a new message Halliday had created, to welcome those visitors who had adopted his new technology:

READY PLAYER TWO



My vision went black for a moment as the headset instructed my brain to place my body into a harmless sleeplike state, while my conscious mind remained active inside what was basically a computer controlled lucid dream. Then the OASIS slowly materialized into existence all around me, and I found myself standing back inside Anorak's study, where I'd last logged out.

Everything looked the same as before, but it *felt* completely different. I was actually *here*, physically inside the OASIS. It no longer felt like I was using an avatar. Now I felt like I *was* my avatar. There was no visor on my face, none of the faint numbness and constriction you always felt wearing a haptic suit or gloves. I didn't even feel the ONI headset my real body was actually wearing. When I reached up to scratch my head, the device wasn't there.

A light breeze blew into the study through the open window, and I could feel it on my skin and my face and in my hair.

I could feel my feet resting on the stone floor, snug inside the boots that my avatar was wearing.

I realized I could smell my surroundings too. I breathed in the musty scent of the ancient spell books that lined the walls, mingled with the smoke of the burning candles.

I reached out to touch a nearby worktable. I could feel the grooves in the woodgrain as I ran my fingertips across it. Then I spotted a large bowl of fruit on the table—one that hadn't been there before. I picked up an

apple and felt the weight of it in my hand, and its hard smoothness against my palm. I squeezed it with all five of my fingertips and felt them create tiny craters of pulp beneath the surface of the apple's skin.

I was awestruck by the perfect replication of all that interlinked sensory input. These were subtle, nuanced sensations that could never be re-created or simulated by a pair of haptic gloves.

I raised the apple to my avatar's lips, which now felt like my own lips, and bit into it with what felt like my own teeth. It tasted *like a real apple*. The most perfectly ripe and delicious apple I'd ever eaten.

An OASIS user had always been able to eat and drink things with their avatar. But eating a food power-up or drinking a healing potion had always been a senseless pantomime performed with your haptic gloves. You never felt anything pass through your lips, and you definitely never tasted anything on your tongue.

Now, thanks to the ONI, I could. And I did.

I began to sample the other fruits in the bowl. The orange, banana, grapes, and papaya tasted just as delicious, and as I took a bite out of each one, I felt the fruit travel down my esophagus to my stomach. I could even feel my stomach getting full.

"Oh my God!" I exclaimed to the empty room. "This is fucking incredible!" But my words were garbled, because I was talking with a mouth full of papaya. I could feel the juice running down my chin. I wiped it on my sleeve. Then I began to run around the room, bursting with excitement, touching different surfaces and objects to see how they felt. And how did they feel? They all felt real. That's how they fucking felt. *It all felt real.*

Once my initial euphoria began to wear off, I found myself wondering if the ONI also simulated pain. Because if pain felt as real as the fruit tasted, it was going to hurt. A lot.

As an experiment, I bit down lightly on my tongue. I could feel the pressure of each tooth against its surface, and the grain of my taste buds as I raked them against my incisors. But I didn't feel any pain whatsoever, no matter how hard I bit. As I suspected, Halliday had put some sort of pain-prevention safeguard in place.

I drew one of my blasters and shot myself in the right foot. I took several hit points of damage, and felt a mild jolt of pain, but it seemed more like a hard pinch than a gunshot.

A giddy laugh escaped me as I holstered my blaster. Then I took three

running steps toward the window and dove out of it, taking flight like Superman. As I rocketed up into the clouds, my robes fluttered in the wind like a cape. I felt like I was really flying.

I also suddenly felt like anything was possible. Because now it clearly was.

This was it—the final, inevitable step in the evolution of videogames and virtual reality. The simulation had now become indistinguishable from real life.

I knew Samantha wasn't going to approve. But I was too exhilarated to let myself think about that. I wanted more. And the ONI had more in store for me. Much more.

I flew back to Anorak's study and continued to experiment with the ONI's abilities. That was when I discovered a new drop-down menu on my avatar's heads-up display labeled *ONI*. When I selected it, I saw a list of a dozen large files that had already been downloaded to my account. They all had an .oni extension, and provocatively simple filenames like RACING, SURFING, SKYDIVING, and KUNG-FU FIGHTING.

I selected SURFING and suddenly found myself standing on a surfboard, expertly riding the curved wall of a giant wave off the coast of some tropical island. But when I reflexively tried to move to keep my balance, I realized that I wasn't in control. This was a passive experience. I was just along for the ride. And somehow, it also *felt* different from what I'd experienced in Anorak's study—where that had been eerily smooth and precise, this was somehow more intense but also jarring and dislocating.

Looking down at my body, I realized that I was no longer Parzival—I was someone else. Someone smaller and thinner, with darker skin, and strands of long black hair hanging in front of their eyes. Someone wearing a bikini. Someone with breasts. I was a woman! And an expert surfer. Not an avatar. A real person had recorded this experience. I was experiencing a piece of someone else's life.

I had no control over my movements, but I could see, hear, smell, and feel everything—every sensation experienced by the woman who had made this recording. I could even feel the ONI headset on my—her—head, and I could also see the portable data drive it was connected to housed inside a waterproof casing that was strapped to her right arm.

That explained the difference in sensations too. I was no longer experiencing simulated input, created for me by the OASIS servers—I was actu-

ally feeling the world through *this* surfer's body, moment by moment, delivered by her synapses. Raw neural input, from a brain that was not my own.

When the wave crashed over me a few seconds later, the experience clip ended and I found myself back inside my own avatar's skin, standing back inside Anorak's study.

I pulled up the next clip, and then the next. I drove a racecar, did some skydiving, kung-fu fighting, deep-sea diving, and horseback riding—all within the same half hour.

I played every .oni file on the list, one after the other, leaping from place to place, from body to body, and from one experience to another.

I stopped when I reached a series of files with names like SEX-M-F.oni, SEX-F-F.oni, and SEX-Nonbinary.oni. I wasn't ready for any of that. I was still truly, madly, deeply in love with Samantha. And I was still reeling from losing my virginity to her just a few days earlier. I didn't want to be unfaithful to her. I figured that cheating was cheating, whether it was live or it was Memorex.

I logged out of the OASIS and took control of my own body once again. The process took a few minutes. Then I removed the ONI headset and opened my eyes. I looked around my office. I checked the time. Over an hour had passed, which seemed about right.

I gripped the arms of my chair. I reached up to touch my face. Reality didn't feel any more real than the OASIS had just felt to me. My senses couldn't discern between the two.

Halliday was right. The ONI was going to change the world.



How in the hell had Halliday done this? How had he managed to invent such a complex device in secret? Hardware hadn't even been his specialty.

The documentation he'd sent me held the answer. When I read through the rest of it, I learned that Halliday had been working on this for over twenty-five years, with an entire research lab full of neuroscientists—hiding his secret in plain sight.

A few months after GSS launched the OASIS, Halliday set up an R&D division at the company called the Accessibility Research Lab. Ostensibly, its mission had been to create a line of neuroprosthetic hardware that

would allow people with severe physical disabilities to use the OASIS more easily. Halliday hired the best and brightest minds in the field of neuroscience to staff the ARL, then he gave them all the funding they would ever need to conduct their research.

The ARL's work over the next few decades was certainly no secret. To the contrary, their breakthroughs had created a new line of medical implants that became widely used. I'd read about several of them in my high school textbooks. First, they developed a new type of cochlear implant that—for those who chose to use it—allowed the hearing impaired to perceive sound with perfect clarity, both in the real world and inside the OASIS. A few years later, they unveiled a new retinal implant that allowed any blind people who wished to be sighted to “see” perfectly inside the OASIS. And by linking two head-mounted mini cameras to the same implant, their real-world sight could be restored as well.

The ARL's next invention was a brain implant that allowed paraplegics to control the movements of their OASIS avatar simply by thinking about it. It worked in conjunction with a separate implant that allowed them to feel simulated sensory input. And the very same implants gave these individuals the ability to regain control of their lower extremities, while restoring their sense of touch. They also allowed amputees to control robotic replacement limbs, and to receive sensory input through them as well.

To accomplish this, the researchers devised a method of “recording” the sensory information transmitted to the human brain by the nervous system in reaction to all manner of external stimuli, then compiled these assets into a massive digital library of sensations that could be “played back” inside the OASIS to perfectly simulate anything a person could experience through their senses of touch, taste, sight, smell, balance, temperature, vibration—you name it.

GSS patented each of the Accessibility Research Lab's inventions, but Halliday never made any effort to profit from them. Instead, he set up a program to give these neuroprosthetic implants away, to any OASIS users who could benefit from them. GSS even subsidized the cost of their implant surgery. This program made powerful new tools available to any physically disabled individuals who chose to use them, but it also provided the ARL with a nearly unlimited supply of willing human guinea pigs on whom to conduct their ongoing experiments.

I'd grown up seeing headlines about the ARL's breakthroughs with brain

implants on the newsfeeds, but like most people I'd never really paid much attention to them, because the technology was only available to people who were severely physically disabled and willing to undergo invasive (and possibly fatal) brain surgery.

But while they were making all of these astounding breakthroughs, the Accessibility Research Lab also spent those decades developing another, secret piece of technology, one that would ultimately stand as the ARL's greatest achievement—a computer-brain interface that could accomplish everything their implants could, but without the need for surgery. Using the wealth of data they'd amassed on the inner workings of the human mind and an elaborate combination of EEG, fMRI, and SQUID technologies, the lab had developed a way to read brain waves and transmit them solely via dermal contact. Halliday compartmentalized each facet of the project, so that each team of scientists or engineers worked in isolation from the others, and he alone knew how it was all going to fit together.

It took billions of dollars and decades of work before they finally succeeded in creating a fully functional prototype of the OASIS Neural Interface headset. But as soon as they completed the final round of safety testing, Halliday shut the ONI project down and proclaimed it a failure. A few weeks later he shuttered the Accessibility Research Lab and fired its entire staff. They were all given severance packages that ensured they'd never need to work again—contingent upon their strict adherence to the nondisclosure agreements they'd signed when they were first hired.

This was how Halliday had created the world's first noninvasive brain-computer interface without the world knowing it.

And now my friends and I had inherited this invention. It was ours—to bury or to reveal.



We didn't make our decision lightly. We weighed all of the pros and cons. Then, after a heated debate, the four of us held a vote. The ayes had it. And just like that, we changed the course of human history forever.

After another series of safety trials, GSS patented the OASIS Neural Interface technology and began to mass-produce the headsets. We put them on sale at the lowest possible price, to make sure as many people as possible could experience the OASIS Neural Interface for themselves.

We sold a million units that first day. And the moment our headsets hit the store shelves, IOI's entire line of VR goggles and haptic gear were instantly rendered obsolete. For the first time in history, GSS became the world's leading manufacturer of OASIS hardware. And as word of the ONI's abilities began to spread, sales continued to increase exponentially.

And then, just a few days later, it happened—the event that set this whole tale in motion.

A few seconds after the OASIS servers reached 7,777,777 simultaneous ONI users, a message appeared on Halliday's long-dormant website, where the Scoreboard for his contest had once resided:

Seek the Seven Shards of the Siren's Soul
On the seven worlds where the Siren once played a role
For each fragment my heir must pay a toll
To once again make the Siren whole

It came to be known as the Shard Riddle, and the first thing old-school gunters noticed was that its rhyme scheme and syllable count were identical to the “Three Hidden Keys Open Three Secret Gates” rap that Halliday had used to announce his famous Easter-egg hunt.

People assumed the Shard Riddle was just an elaborate publicity stunt, concocted by GSS's new owners to help promote the roll-out of our ONI headsets. And we never did anything to deny or discourage these rumors, because they helped foster the perception that the OASIS was now under our complete control. But the four of us knew the unsettling truth. We had no idea what the hell was going on.

The Shard Riddle appeared to announce the existence of a second Easter egg—another object hidden somewhere inside the OASIS by its eccentric creator sometime prior to his death. And the timing of the riddle's appearance couldn't be a coincidence. It had clearly been triggered by our decision to release the OASIS Neural Interface to the public.

So what exactly was Halliday trying to tell us?

The “Siren” seemed to be a reference to Kira Morrow, Og's deceased wife and Halliday's unrequited love. Back when they were all in high school together in Ohio, Kira had named her Dungeons & Dragons character Leucosia, after one of the Sirens of Greek myth. Many years later Kira had given her OASIS avatar that same name. After her death, Halliday had used

the name Leucosia as a computer password, which I'd had to guess to win the final challenge of his contest.

It wasn't clear what would happen if someone managed to collect the Seven Shards and "once again make the Siren whole." But I started searching for them anyway. Halliday had thrown down a gauntlet once again, and I couldn't resist picking it up.

And I wasn't alone. The riddle's appearance spawned a whole new generation of gunters, and they all began to scour the OASIS for the Seven Shards. But unlike Halliday's egg, no reward for finding the Siren's Soul had ever been announced, so no one knew exactly what they were searching for, or why.



In what seemed like the blink of an eye, an entire year passed.

We hit three billion units sold. Then four.

It quickly became evident that our patented, proprietary brain-computer-interface headsets had an endless array of non-OASIS-related applications in the fields of science, medicine, aviation, manufacturing, and warfare.

Innovative Online Industries' stock continued to plummet. When it fell low enough, we orchestrated a hostile takeover of the company. GSS absorbed IOI and all of its assets, transforming us into an unstoppable megacorporation with a global monopoly on the world's most popular entertainment, education, and communications platform. To celebrate, we released all of IOI's indentured servants and forgave their outstanding debts.

Another year passed. The OASIS reached a new benchmark—five billion individual users logged in each day. Then six. Two-thirds of the people on our overcrowded, rapidly warming little planet. And over 99 percent of the people who accessed the OASIS now did so using one of our neural interface headsets.



Just as Halliday predicted, this new technology began to have a profound impact on people's day-to-day lives, and on human civilization at large.

There were new experiences to download every day. Anything and everything you could imagine. You could go anywhere, do anything, and be anyone. It was the most addictive pastime imaginable—far more addictive than the OASIS had ever been, and that was saying something.

Other companies made attempts to reverse-engineer the ONI headset and steal our neural-interface technology—but the software and processing power required to make the ONI technology function was all part of the OASIS. Experiences could be recorded offline as an .oni file, even a bootleg one, but the file could only be played back by being uploaded to the OASIS. This allowed us to weed out unsavory or illegal recordings before they could be shared with other users. It also let us maintain our monopoly on what was rapidly becoming the most popular form of entertainment in the history of the world.

GSS rolled out the ONI-net, a social-media platform built around .oni file-sharing. It allowed users to browse, purchase, download, rate, and review ONI experiences recorded by billions of other people around the world. It also allowed you to upload your own experiences and sell them to the rest of the OASIS.

“Sims” were recordings made inside the OASIS, and “Recs” were ONI recordings made in reality. Except that most kids no longer referred to it as “reality.” They called it “the Earl.” (A term derived from the initialism IRL.) And “Ito” was slang for “in the OASIS.” So Recs were recorded in the Earl, and Sims were created Ito.

Now instead of following their favorite celebrity on social media, ONI users could *become* their favorite celebrity for a few minutes each day. Exist inside their skin. Live short, heavily curated fragments of far more glamorous lives.

Now people no longer watched movies or television shows—they lived them. The viewer was no longer in the audience. Now they were one of the stars. Instead of just being in the audience at a rock concert, now you could experience the concert as each member of your favorite band, and be each one of them as they/you performed your favorite song.

Anyone with an ONI headset and an empty data drive could record a real-life experience, upload it to the OASIS, and sell it to billions of other people all around the world. You earned coin for every download, and GSS only took 20 percent off the top for making it all possible. If one of your

clips went viral, the profits could make you rich overnight. Movie, rock, porn, and streaming stars were all scrambling to exploit this brand-new revenue stream.

For less than the cost of an iced latte, you could now safely experience just about anything that human beings *could* experience. You could take any drug, eat any kind of food, and have any kind of sex, without worrying about addiction, calories, or consequences. You could relive uncut real-life experiences, or play your way through scripted interactive adventures inside the OASIS. Thanks to the ONI, it all felt completely real.



The ONI made the lives of impoverished people all around the world a lot more bearable—and enjoyable. People didn't mind subsisting on dried seaweed and soy protein when they could log on to the ONI-net and download a delicious five-course meal anytime they pleased. People could sample any cuisine from any part of the globe, prepared by any of the world's finest chefs, and have it served to them in a mansion, or on a mountaintop, or in a scenic restaurant, or on an autojet headed to Paris. And as a bonus, you could experience any of these meals as a diner with unusually sensitive taste buds. Or as a celebrity, dining with other celebrities, who were all being waited on by a bunch of ex-celebrities. Name your poison.

Moderating all of this user-generated content was a challenge—and a huge responsibility. GSS implemented CenSoft, our custom strong-AI censor software, which scanned every .oni recording before it was released and flagged suspicious content for human review. Questionable material was reviewed by GSS employees, who then decided whether the clip was safe to release—and, if any criminal behavior was captured, they forwarded it on to law enforcement officials in the uploader's country or region.

New applications of ONI technology continued to reveal themselves. For example, it became fashionable for young mothers to make an ONI recording while they gave birth to their child, so that in a few decades, that child would be able to play back that recording and experience what it feels like to *give birth to themselves*.



And me?

All my dreams had come true. I'd gotten stupidly rich and absurdly famous. I'd fallen in love with my dream girl and she had fallen in love with me. Surely I was happy, right?

Not so much, as this account will show. I was suddenly way out of my depth, both personally and professionally, so it didn't take very long for me to completely screw up my life once again. And when I did, I returned to seek solace from my oldest friend, the OASIS.

I'd struggled with OASIS addiction *before* the ONI was released. Now logging on to the simulation was like mainlining some sort of chemically engineered superheroin. It didn't take long for me to become an addict. When I wasn't playing back ONI recordings, I was browsing the ONI-net and adding new recordings to my playback queue.

Meanwhile, I continued to search for the Seven Shards of the Siren's Soul. I could teleport anywhere in the OASIS, buy anything I wanted, and kill anyone who got in my way. But I still wasn't making any progress. And I couldn't understand why.



Finally, out of a mixture of disgust and desperation, I offered a billion dollars to anyone who could provide me with information on how to locate just one of the Seven Shards. I announced this reward with a stylized short film that I modeled after *Anorak's Invitation*. I hoped it would seem like a lighthearted play on Halliday's contest instead of a desperate cry for help. It seemed to work.

My billion-dollar shard bounty caused quite a stir inside the OASIS. The number of gunters searching for the shards quadrupled overnight. But none of them managed to claim my reward. (For a brief time, some of the younger, more idealistic shard hunters referred to themselves as "shunters" to differentiate themselves from their elder counterparts. But when everyone began to call them "sharters" instead, they changed their minds and started to call themselves gunters too. The moniker still fit. The Seven Shards were Easter eggs hidden by Halliday, and we were all hunting for them.)

Another year passed.

Then, just a few weeks after the third anniversary of the ONI's launch,

it finally happened. An enterprising young gunter led me to the First Shard. And when I picked it up, I set in motion a series of events that would drastically alter the fate of the human race.

As one of the only eyewitnesses to these historic events, I feel obligated to give my own written account of what occurred. So that future generations—if there are any—will have all the facts at their disposal when they decide how to judge my actions.

Level Four

My friend Kira always said that life is like an extremely difficult, horribly unbalanced videogame. When you're born, you're given a randomly generated character, with a randomly determined name, race, face, and social class. Your body is your avatar, and you spawn in a random geographic location, at a random moment in human history, surrounded by a random group of people, and then you have to try to survive for as long as you can.

Sometimes the game might seem easy. Even fun.

Other times it might be so difficult you want to give up and quit.

But unfortunately, in this game you only get one life.

When your body grows too hungry or thirsty or ill or injured or old, your health meter runs out and then it's Game Over.

Some people play the game for a hundred years without ever figuring out that it's a game, or that there is a way to win it.

To win the videogame of life you just have to try to make the experience of being forced to play it as pleasant as possible, for yourself, and for all of the other players you encounter in your travels.

Kira says that if everyone played the game to win, it'd be a lot more fun for everyone.

—*Anorak's Almanac*, chapter 77, verses 11–20



Like Marty McFly, I woke up at exactly 10:28 A.M., to the song “Back in Time” by Huey Lewis and the News.

This was courtesy of my vintage flip-clock radio—a Panasonic RC-6015, the model Marty owns in the film. I’d had it modified to play the same song at the same time Marty hears it, after he finally makes it back to the future.

I threw back the silk sheets of my king-size bed and lowered my feet to the preheated marble floor. The house computer saw that I was awake and automatically drew back the bedroom’s wraparound window shades, revealing a stunning 180-degree view of my sprawling woodland estate, and of the jagged Columbus skyline on the horizon.

I still couldn’t quite believe it. Waking up in this room, to this sight, every day. Not long ago, just opening my eyes here had been enough to put a grin on my face and a spring in my step.

But today, it wasn’t helping. Today I was just alone, in an empty house, in a world teetering on the brink of collapse. And on days like this, the four hours I had to wait until I could put my ONI headset back on and escape into the OASIS stretched out in front of me like an eternity.

My gaze focused on the Gregarious Simulation Systems building, a shining arrowhead of mirrored glass rising from the center of downtown. GSS HQ was just a few blocks from the old IOI skyscraper complex where I’d briefly been an indentured servant. Now it belonged to GSS too. We’d turned all three buildings into free BodyLocker hotels for the homeless.

You can probably guess which one of the four of us spearheaded that initiative.

Following the skyline a few more centimeters to the right, I could also make out the silhouette of the converted Hilton hotel where I'd rented an apartment during the final year of the contest. It was a tourist attraction now. People actually bought tickets to see the tiny ten-by-ten efficiency where I'd locked myself away from the world to focus on my search for Hallday's Easter egg. I'm not sure any of those people realized that was the darkest, loneliest time in my life.

By all appearances, my life was completely different now. Except that here I was, standing at the window, moping around, already jonesing for my ONI fix.

I'd had the Portland Avenue Stacks in Oklahoma City where I'd grown up demolished years ago, so that I could erect a memorial for my mother and my aunt and Mrs. Gilmore and all of the other poor souls unfortunate enough to have died in that hellhole. I paid to have all of its residents relocated to a new housing complex I had built for them on the city outskirts. It still warmed my heart to know that all of the former residents of the stacks had, like me, become something they'd never imagined they could be—homeowners.

Even though the stacks where I'd grown up no longer existed in the real world, I could still visit them anytime I pleased, because there was a highly accurate OASIS re-creation of the Portland Avenue Stacks just as I remembered them, constructed from photos and video of the real location taken before the bombing. It was now a popular OASIS tourist attraction and school field-trip destination.

I still went there occasionally myself. I would sit inside the meticulous re-creation of my old hideout, marveling at the journey that had led me from there to where I was now. The real van that I'd used as my hideout had been extracted from the junk pile and airlifted to Columbus, so it could be put on display in the GSS Museum. But I preferred to visit the simulation of my hideout over the real deal, because in the OASIS, my hideout was still buried in a pile of abandoned vehicles at the base of the Portland Avenue Stacks, which still stood intact, as they had throughout my childhood, before Sorrento's bombs brought them crashing down and brought my childhood to its end.

Sometimes I wandered over to the replica of my aunt Alice's old stack. I would climb the stairs to her trailer, go inside, curl up in the corner of the laundry room where I used to sleep, and apologize to my mother and my aunt Alice for indirectly causing their deaths. I didn't know where else to go to talk to them. Neither of them had a grave or a tombstone I could visit. Neither did my father. All three of them had been cremated—my aunt Alice at the time of her death, and my parents after the fact, courtesy of the city's free cremation and remains-recycling program. Now all they were was dust in the wind.

Those visits made me understand why Halliday had re-created Middletown in such loving detail, when it had been the setting of so many of his own unhappy childhood memories. He wanted to be able to revisit his own past, to get back in touch with the person he used to be, before the world had changed him.

"T-T-Top o' the morning, Wade!" a familiar voice stuttered as I stepped into the bathroom. I glanced sideways to see Max, my long-suffering system-agent software, smiling at me from the surface of the giant smart mirror above the sink.

"Morning, Max," I muttered. "What's up?"

"The opposite of down," he replied. "That was easy! Ask me another one. Go ahead."

When I didn't respond, he made a heavy-metal face and started to play air guitar while shouting: "Wade's World! Wade's Word! Party time! Excellent!"

I rolled my eyes in his direction and manually flushed the toilet for effect.

"Jeez," Max said. "Tough crowd. Wake up on the wrong side of the coffin again today?"

"Yeah, it kinda feels like it," I said. "Start morning playlist, please."

"This Must Be the Place (Naive Melody)" by Talking Heads began to play over the house speakers, and I immediately felt more relaxed.

"Gracias, Max."

"De nada, my little enchilada."

I'd reinstalled MaxHeadroom v3.4.1 as my system-agent software a few months ago. I thought his presence might help me recapture the same mindset I'd had during Halliday's contest. And it had worked, to a degree.

It was like visiting with an old friend. And in truth, I needed the company. Even though, in the back of my mind, I knew that talking to your system-agent software was only slightly less weird than talking to yourself.

Max read me the day's headlines as I dressed in my workout clothes. I told him to skip all of the stories that involved war, disease, or famine. So he started reading me the weather report. I told him not to bother, then I put on my brand-new Okagami NexSpex augmented-reality glasses and headed downstairs. Max came along with me, reappearing on a network of antique CRT monitors mounted along my route.

Even in the middle of the daytime, Halliday's old mansion felt deserted. The housekeeping was all done by high-end humanoid robots who did most of their work while I slept, so I almost never saw them. I had a personal cook named Demetri, but he rarely left the kitchen. The team of security guards who manned the front gates and patrolled the grounds were human, too, but they only entered the house if an alarm went off or I summoned them.

Most of the time it was just me, all by my lonesome, in a giant house with over fifty rooms, including two kitchens, four dining rooms, fourteen bedrooms, and a total of twenty-one bathrooms. I still had no idea why there were so many toilets—or where they were all located. I chalked it up to the previous owner's well-known eccentricity.

I'd moved into James Halliday's old estate the week after I won his contest. The house was located on the northeastern outskirts of Columbus, and it was completely empty at the time. At his request, all of Halliday's possessions had been auctioned off after his death five years earlier. But the deed to the house and the thirty acres of land it stood on had remained a part of his estate, so I'd inherited it along with the rest of his assets. Samantha, Aech, and Shoto had all been kind enough to sell their shares of the property back to me, making me its sole owner. Now I lived in the same secluded fortress where my childhood hero had locked himself away from the world for the latter part of his life. The place where he had created the three keys and gates . . .

To my knowledge, Halliday had never given this place a name. But I thought it needed one, so I'd christened it Monsalvat, after the secluded castle where Sir Parzival finally locates the Holy Grail in some versions of the Arthurian legend.

I'd been living at Monsalvat for over three years now, but most of the house still remained empty and undecorated. It didn't look that way to me, though, because the AR specs I wore decorated the house for me on the fly as I walked around it. It covered the sprawling mansion's bare walls with grand tapestries, priceless paintings, and framed movie posters. It filled each of the empty rooms with illusory furniture and elegant décor.

That is, until I instructed my AR system to repurpose all that empty space, just as I was about to do now, for my morning run.

"Load *Temple of Doom*," I said as I reached the bottom of the grand staircase.

The empty foyer and dimly lit hallways of the mansion were instantly transformed into a vast subterranean labyrinth of caverns and corridors. And when I glanced down at myself, the workout clothes I'd been wearing had been replaced with a perfectly rendered Indiana Jones costume, complete with a worn leather jacket, a bull-whip on my right hip, and a battered fedora.

Indy's theme music began to play as I jogged down the corridor, and a variety of obstacles and enemies started to appear in front of me, forcing me to either dodge them or attack them with my imaginary whip. I earned points for every obstacle I avoided and for every enemy I vanquished. I could also earn bonus points for keeping my heart rate up, and for freeing the captive children being used as slave labor in the temple from their holding cells, which were scattered along my path. I ran a total of five miles like this, sprinting from one end of my house to the other and back again. And I managed to beat my previous high score.

I ended the game program and took off my AR goggles, then I toweled off and drank some water before heading to my workout room. On the way there, I stopped by the garage to admire my car collection. Of all my daily rituals, it was the one that never failed to make me smile.

The estate's enormous garage now contained four classic movie car replicas—the same four movie cars that had inspired my avatar's OASIS mash-up vehicle, ECTO-88. I owned screen-accurate replicas of Doc Brown's 1982 DeLorean DMC-12 time machine (pre-hover conversion); the Ghostbusters' 1959 Cadillac hearse Ectomobile, Ecto-1; the black 1982 Pontiac Firebird Trans-Am Knight Industries 2000, KITT (with Super-Pursuit Mode); and finally, sitting down at the far end, a replica of Dr.