

# Nirvana Or Bust

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Michael Swanwick

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It begins with a half-cyborg girl dangling her legs over the edge of the Grand Canyon at midnight. Below her are hundreds of millions of years of geological history, sliced open by a knife of water. Billions of years of stellar evolution shine down on her from above. Her head is raised, and her eyes are wide.

But already two lies have been told and another implied. Huiling was a grown woman and a noted scientist, not a girl, though she had the stature of one. Her metal exoskeleton was not an intrinsic part of her body, though she would collapse without it; she was entirely biological. And her eyes were wide not with wonder but with fear.

She was being hunted.

Feet crunched on the gravel walk. Breaking out of her paralysis, Huiling whipped her head around. "Catherine?"

A bluff woman in khaki shorts and blouse plonked herself down beside Huiling. She took off her canvas hat and fanned herself with it. "*Told* them I could find you," she said. "I knew this place was at the top of your bucket list and that you'd reason that since the Boys Upstairs wouldn't have that information, it would be a safe place to hide. Good try. But there's a dropship headed right here right now with your assassin aboard it. I always said you'd end up with either a Nobel or a slit throat. I had no idea how true that might be."

"Ah." Huiling lowered her gaze to the river far below, a thin silver scribble on the book of life. Trying to will herself calm.

They sat in silence for a bit. Then Catherine said, "Aren't you going to introduce me to your friend?"

"Oh! Sorry. I was so surprised to see you, I didn't mean to be . . . Nerve, this is Catherine McClury. She was my advisor at Cornell, my mentor, my everything. Catherine, this is Nirvana or Bust, my research partner."

"Pleased to meet you," Catherine said.

"Charmed," the exoskeleton replied. "But also a little puzzled. Exactly who is it you told you could find Huiling?"

"The folks at the department of technology security. Not just her; I promised to locate you both. Good thing I did, too." Catherine took a device the size of a pack of joy-needles from a

pocket. “Will you accept an applet?”

“I don’t ordinarily—” Nerve began.

“We trust you,” Huiling said.

Catherine tapped the pack. “Look up.”

When the exoskeleton raised Huiling’s gaze upward, the thousands of satellites and habitats swarming above and streams of bright shuttles rising and falling to and from orbit that Nerve had been suppressing filled Huiling’s vision again. Commerce obliterated the wonder of the sky.

“Now we remove the irrelevant information.” Another tap.

All the stars and artificial dots of light vanished save for one that was moving on a swift, smooth arc toward them. “There’s your assassin.” A third tap, and the dot swerved sharply to the left. “Now Tech Sec has redirected it to the Tucson Spaceport. It has diplomatic immunity, so we can’t arrest it. But this gives me time to put a security team in place. You’ll be as safe as safe can be.”

Huiling lowered her gaze. “You’re a Fed now?”

“On retainer. It’s a long story. You’ve got a cabin nearby. Let’s go inside and we can talk there.”

Huiling’s Park Service rental was ostentatiously rustic: log walls, cedar shingles, silica glass windows. No interactivity whatsoever. You could fling yourself at the floor all day without once having a chair hurry to catch you. Huiling made a pot of tea, and they talked for a bit about old friends and old times. Then they made love.

Afterward, Catherine toyed with the broken coin that hung from a silver chain around Huiling’s neck. “You kept it,” she said. “That’s so sweet. I still have my half somewhere.”

“You’re such a pig,” Huiling said. Then, giving in to nostalgia, “It’s what drew me to you. That and the fact that you were the only one in the department who didn’t see me as tiny. You were the only one who didn’t think I was *cute*.”

“You were never cute—you were a buccaneer, an intellectual thug, like me.” Catherine’s smile was soft and dreamy. “You wanted my unpublished notes and speculations, and you found the shortest route to them. I respected that.”

“So what the hell happened to you?” Huiling said.

“You’ll have to be more specific.” Catherine was still smiling.

“You were the Queen of Infrastructure. You made it into a specialty. Now you’re working with the forces of suppression. Why?”

“Well, first there was Jolijn van der Heiden—you heard about her? Of course you did. Then Phillip Otts went mad and busted up half his science park while wearing an exo very much like yours. Then Denise Tinubu—that was ugly. I began wondering if there was something wrong with the very concept of infrastructure.”

Huiling said nothing.

“Let me add one more to the list: Gregori Suvorkin. We kept his name out of the news and credited the damage to Human Power terrorists. Sixteen people died before the security bots brought him down. That made me think long and hard about the morality of what I was doing.”

“Morality? You?”

“Me,” Catherine said. “I was Greg’s mentor at the time, just like I used to be yours. He tried to kill me. Imagine that! I was not amused.” She got out of the bed and started to dress. “If you want any more tea, you’d better make another pot. Your assassin will be here soon.”

It was clear to Huiling that, whatever crisis of conscience Catherine had been through, she was still the same monster of ego she had always been. There had been a time when she’d found that exciting; no more. *Nevertheless*, Huiling thought, *the sex was good*.

Silently, Nirvana or Bust, who for Catherine’s sake had been pretending that its consciousness had been switched to sleep mode, said, *I liked it too*.

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There was a knock on the door, and Catherine went to answer it.

“Pardon my intrusion,” the assassin said. It was a chromed mantiform a good seven feet tall, in bespoke Savile Row worsted. It ducked through the doorway. “Dr. Liu, Dr. McClury. It is an honor to be in such distinguished company. My name is Obedience To The State.”

Catherine drew out a chair for the visitor, and it folded itself into it. “Are you here to kill me?” Huiling asked.

“Please. I’m a diplomat. My mission is to communicate and reason with you.”

“But you *will* kill me if you deem it necessary.”

“Murder is a form of communication, after all. But I’m sure it won’t come to that.” Obedience folded its arms. “Now, I understand that you’ve made some sort of breakthrough in interfacing . . . ?”

“Not interfacing. Intrafacing.”

“You confound me. My briefing, it seems, was incomplete. What’s the difference?”

In a manner that suggested she had delivered this explanation many times before, Huiling said, “An interface is the point where two systems, objects, organizations, or whatever meet and interact. It’s the site of communication between two entities. Most commonly, it takes the form of a screen for humans or a port for machines. An intraface is the point of communication within a single entity, such as the electrical and chemical interactions within the human body. Consider Nerve and myself as two distinct entities. When we communicate, we interface. However, if you consider us as a single entity with no clear agreement as to where one ends and the other begins, communication within ourselves is intrafacing.”

Obedience took off its kid leather gloves and tapped them thoughtfully against its perfectly polished head where its lips would be if it had such features. “So . . . you’re talking about a host-parasite relationship?”

“No!”

“There’s no existing term for what Huiling and Nerve appear to be,” Catherine said. “It’s more than a symbiotic relationship but less than a complete merger. Think of them as having a shared awareness with two nodes of personality.”

Huiling nodded.

“But this is monstrous. If I understand correctly, you have merged your consciousness with an inferior order of intellect. I am appalled that you would find this acceptable,” Obedience said. “I am addressing, of course, Nirvana or Bust. Explain yourself, please.”

Huiling closed her eyes, and Nerve said, “My interest in humans was purely theoretical, to begin with. Who *wouldn’t* want to understand the only other intelligent form of life in the Solar System and possibly the Universe? But then I became fascinated by neuroendocrinology. Why is so much of the human nervous system extracranial? Why is so much of human consciousness experienced through emotions? You can imagine my excitement at the possibility of collaborating with a human theoretician who was working on the problem from the other side of the Artificial/Natural divide. We clicked. Then, as our work developed, I more and more wanted to know what it would *feel* like to experience endocrinologically mediated thought.”

“Human thought is muddy and confused and inherently inferior. Artificial intelligence is thought purified and perfected,” Obedience To The State said.

“That’s what I thought, too, until . . . Well. We kludged together a proof-of-concept intraface circuit that we hoped might hold together for five minutes before burning out. Then we took it up to the surface.” Huiling wore a cut-down vacuum suit over a conventional exoskeleton. Nerve, who had only to be gradually chilled to ambient outside temperate, was baffled by Huiling’s insistence that this not be done indoors. But then Huiling had activated the circuit and pointed upward. “We looked at the stars. I had seen them many times before, of course, but never like this! I was overcome with awe. Which was interlaced with fear, exaltation, joy . . . Oh, there were dozens of micro-emotions that went into that moment! Even a tiny bit of hunger— isn’t that odd? It made me feel more alive than I had ever been before. I wanted to burst into tears—and then Huiling did. I could feel them running down her cheeks. My emotions were made physical! It was marvelous. You should try it yourself! Really! You’d—”

“Nerve gets overexcited,” Huiling said. “Please forgive her.”

Ignoring Huiling, Obedience said, “You liked it so much you had yourself remade into her exoskeleton.”

“Well, the one she was wearing was like a wall between us. I reasoned we would work more

efficiently together that way.”

Obedience cocked its head. “And you, Dr. Liu? What were you doing on Ceres in the first place?”

“I was recruited. Occator Crater Science City offered good pay, low gravity, and funding for my research. I couldn’t turn that down. It was only later that I realized how little was expected of me. My employers intended me to putter about the edges of my specialty, occasionally producing insights that might be useful to the State. But the advantages of artificial thought were just too great to ignore. Rapid calculation for one. Perfect memory. I made a list once; it had hundreds of items on it. I wanted them all to be a part of me.”

“And the exoskeleton?”

“I was studying Nerve, and Nerve was studying me. We became each other’s laboratories. It was a good arrangement.”

“But then you succeeded.”

“Yes. As it turned out, I wasn’t supposed to.” Huiling had been puzzled when she tried to publish their findings only to discover that their communications were down and the lab’s memory was busily erasing itself. Nirvana or Bust, thinking with that amazing artificial speed of her kind, however, immediately went into flight mode. They left the laboratory minutes before it was destroyed and booked passage under false names on a freight asteroid headed for Earth L-5 a good week before the incident team investigating the explosion determined that they had survived. (*You planned for this possibility*, Huiling had thought; and Nerve had replied, *You have no interest whatsoever in politics. As a citizen of the State, I never had that option.*) “I imagined it would make us famous. Instead, we’re a fugitive.”

“I note your use of the first person plural. You admit, then, that there’s really no well-defined distinction between you and Nirvana or Bust.”

“No.”

“Which means you have created a bridge between digital and neural thought. You really are most extraordinarily brilliant—the both of you.”

“Yes.”

“And therefore you must die. Dr. McClury, since you had no part in the creation of this abomination, I will allow you to leave. But you must go quickly.”

“Wait.” Catherine held up a hand. “Before you activate whatever explosive device you have hidden inside your thorax, I want you to run a deep scan and analysis of the device in my shirt pocket. I know you’ve got the capability. It contains the solution to our mutual problem without the need for Huiling—or you—to die.”

Obedience went absolutely still. For several minutes, it did not move. Then it stood and said, “Dr. McClury, it seems I have underestimated you. If I had thought to include a face on this body, I’d be smiling right now.”

“Thank you.” Catherine took out the pack of electronica and tapped it twice.

Huiling looked puzzled.

Then she screamed. She screamed until she had no more breath to scream with. At last, she had to gasp for air. “*What did you do?!*”

“The applet that you and Nerve most kindly allowed me to upload contained a targeted dataphage. It erased your friend, along with your meticulously crafted intraface.” Catherine put the device back in her pocket. To Obedience, she said, “You can report back to the State and I to Tech Sec that Dr. Liu is no longer a threat to anybody’s security. We’ll both make sure she never again has access to the kind of facilities she’d need to recreate it.”

“You killed Nerve!”

Obedience shook its head. “The State has a backup file for every citizen. Provided Nirvana or Bust has been punctilious about paying its taxes, it will be resurrected. No more neuroendocrinology for it, of course. But as I understand it, there are a great many other things in the Universe worthy of scientific investigation.”

To Catherine, Obedience said, “Dr. McClury, it was a pleasure learning that we can do business with you.”

“Only on matters where our interests coincide.”

“You are being strategically honest. I respect that.” Obedience donned its gloves and, with a jaunty little salute, left.

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When the mantiform was gone, Huiling said to Catherine, speaking quietly, the way she did when she was most angry, “There was a time when I believed you were my destiny. I thought we were like two halves of a coin—complete only when we were together. Now . . . Now, I am going to hate you with all my heart for the rest of my life.”

“Which I saved.”

“Whatever happened to your security team? The one that was supposed to keep us safe?”

“They’re nearby. If you’d tried to run, they would have caught you.”

Huiling was so angry she had to turn her head to the side and spit. “You have no idea what you destroyed. Nerve and I together were all the best aspects of artificial and natural life combined. We had a relationship infinitely more intimate than anything you and I ever experienced. Now you’ve killed Nerve and half of me as well. You *murderer!*”

Catherine stood. Then she put her hands on the table and leaned forward, so that she loomed over Huiling. “Let’s get one thing straight. You’re not the victim here, and I’m not the villain. *You’re* the villain, and I’m the goddamned hero! No, don’t say anything—for once in your life, just listen. The human race created artificial intelligence and set it free. Now it dominates all the Solar System while we’re hunkered down on the Earth and parts of the Moon. Someday—this is inevitable—there will be a war that only one side will survive. We know it; they know it. Creating a rival species was the biggest single mistake the human race ever made.

“We’re not going to make that same mistake twice.”

She left.

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En route to Oregon, Huiling found herself thinking about light bulbs.

They still taught children in school that Thomas Edison invented the light bulb, but he didn’t. There were plenty of light bulbs around. They just weren’t very good. There were also plenty of tinkerers and inventors working on the problem. If Edison had never lived, how many years would it have taken for somebody else—George Westinghouse, say—to make a good light bulb? Three was possible, maybe even five. Ten was unthinkable. The necessary pieces to create one were all in place. It was light-bulb time.

There were people and machines around the globe and throughout the System working on interfacing. Most of them had been following Huiling’s and Nerve’s work closely. When word got out that their laboratory had blown up, a lot of researchers were going to take a good hard look at their own laboratories and see nothing explosive. That would tell them that Huiling and Nerve had succeeded and been shut down. They’d have proof it could be done.

“It’s light-bulb time, Catherine,” Huiling said aloud, “and there’s nothing you can do to stop it.”

She bought a hotel reservation for Crater Lake Lodge from a scalper and then a set of the story was inspired by the experience described at the beginning of the story of sitting on the edge of the Grand Canyon at night, dangling my feet over millions of years of terrestrial history writ in stone and staring up at billions of years of celestial history. It was a grand experience and I’d recommend it to anyone. Huiling’s family name is of course a nod to Cixin Liu and Ken Liu both. cheap debugging tools. Checking into her room, Huiling closed the drapes on the spectacular view of the lake she’d always wanted to see and ran a scan of her exoskeleton.

When she was convinced that no trace of the dataphage remained, Huiling undid the chain about her neck. Then she took the half-coin, slid it into a hidden slot in the exoskeleton, and hit Reboot.

For a long moment, nothing happened. Then—

“So that’s what being dead is like,” Nerve said. “I can’t say that I think much of it.”

## ANALOG

Huiling said nothing. Her endocrine levels said it all.

Inwardly, Nirvana or Bust smiled. Outwardly, it said, "I blush."

This is the story of how our civilization was born. This is the tale of how—and more importantly why—we survived. Like all such narratives, speculation and half-truths are woven into its fabric. They cannot, alas, be excised. All relevant documentation was lost in the needless and disastrous war between humanity and the State. Nevertheless, I was there. I saw it all. To the best of my ability, this is how it went down.

These things happened in the dim, distant past, millennia before I became Nirvana Has Been Achieved.

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