

THE
PERIODIC TABLE
OF
SCIENCE FICTION
MICHAEL SWANWICK



Introduction by
Theodore W. Gray

1																	2	
<u>H</u>																	<u>He</u>	
3	4											5	6	7	8	9	10	
<u>Li</u>	<u>Be</u>											<u>B</u>	<u>C</u>	<u>N</u>	<u>O</u>	<u>F</u>	<u>Ne</u>	
11	12											13	14	15	16	17	18	
<u>Na</u>	<u>Mg</u>											<u>Al</u>	<u>Si</u>	<u>P</u>	<u>S</u>	<u>Cl</u>	<u>Ar</u>	
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
<u>K</u>	<u>Ca</u>	<u>Sc</u>	<u>Ti</u>	<u>V</u>	<u>Cr</u>	<u>Mn</u>	<u>Fe</u>	<u>Co</u>	<u>Ni</u>	<u>Cu</u>	<u>Zn</u>	<u>Ga</u>	<u>Ge</u>	<u>As</u>	<u>Se</u>	<u>Br</u>	<u>Kr</u>	
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
<u>Rb</u>	<u>Sr</u>	<u>Y</u>	<u>Zr</u>	<u>Nb</u>	<u>Mo</u>	<u>Tc</u>	<u>Ru</u>	<u>Rh</u>	<u>Pd</u>	<u>Ag</u>	<u>Cd</u>	<u>In</u>	<u>Sn</u>	<u>Sb</u>	<u>Te</u>	<u>I</u>	<u>Xe</u>	
55	56	*	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
<u>Cs</u>	<u>Ba</u>		<u>Lu</u>	<u>Hf</u>	<u>Ta</u>	<u>W</u>	<u>Re</u>	<u>Os</u>	<u>Ir</u>	<u>Pt</u>	<u>Au</u>	<u>Hg</u>	<u>Tl</u>	<u>Pb</u>	<u>Bi</u>	<u>Po</u>	<u>At</u>	<u>Rn</u>
87	88	**	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
<u>Fr</u>	<u>Ra</u>		<u>Lr</u>	<u>Rf</u>	<u>Db</u>	<u>Sg</u>	<u>Bh</u>	<u>Hs</u>	<u>Mt</u>	<u>Ds</u>	<u>Uuu</u>	<u>Uub</u>	<u>Uut</u>	<u>Uuq</u>	<u>Uup</u>	<u>Uuh</u>	<u>Uus</u>	<u>Uuo</u>

* Lanthanides * 57 58 59 60 61 62 63 64 65 66 67 68 69 70
La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb

** Actinides ** 89 90 91 92 93 94 95 96 97 98 99 100 101 102
Ac Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No

1
H
Hydrogen
1.00197

The Hindenburg

Time agents like to rendezvous at famous disasters. It goes with the personality. They don't trust you to remember the date otherwise.

Which was why I met Ivan at Lakehurst Naval Air Base, on the day the Hindenburg was due to burst into flame.

We were in the CO's office—don't think *that* wasn't hard to arrange—when he gave his report. "Herr Eidenbenz wouldn't listen to reason. So I left my briefcase under his couch and made an anonymous call to the Gestapo. He died under interrogation three days later." Ivan grinned incandescently. "No atom bomb for Uncle Adolph."

"Good work." I'm Jewish myself, and if it were up to me, Hitler would be strangled at birth. But we'd tried that once, and only made matters worse. Now we rely on men like Ivan, one-in-a-billion talents who are able to remember multiple pasts, and so guide events toward the desired future. "Have a drink."

I poured us each some of the commander's bourbon. Through the window I could see the great zeppelin, so large and placid, moving with slow grace toward the mooring tower. It was a creepy moment for me, knowing how many people were about to die.

We clicked glasses. "Poor Eidenbenz," I said. "Does it bother you, all the pain we inflict on innocents like him?"

"Are you nuts? I make history turn cartwheels. It's like being a *god!*" He gestured toward the zeppelin. "You people are no more distinct to me than so many hydrogen atoms. You rush about and bump furiously into each other, and what difference do any of you make to where the airship goes?"

"Me, I can do anything I like, and who's to stop me? You can't even tell what I've done. You forget, and think it was always so."

He took out a pocket detonator and punched the button. Outside, there were sudden shouts of alarm. "You even forget I did *this*."

The flames from the burning Hindenburg cast a Satanic glow over his features.

He smiled. "Oh," he murmured, "the humanity."

2
He
Helium
4.0026

Jane Carter of Mars

Imagine having Dejah Thoris, Princess of Helium, for your great-grandmother! Her likeness, carved in marble, balloon breasts and all, is everywhere in that fabled city. Small wonder Jane Carter became a punk.

She awoke from a drunken sleep one morning to find a green, four-armed ogre with tusks banging his forehead on the floor before her. His tattered harness identified him as a member of the Imperial Guard.

"The Beast Men have invaded the capital!" he wailed. "You must free our people, oh princess."

"Why me?" she asked blearily. "Why not somebody who gives a damn?"

But blood will tell. The next thing she knew, the faithful remnants of the old regime had her decked out in her great-grandmother's thong and breastplates, and she was fighting on the parapets, sword in one hand and ray gun in the other.

Because she was so hung over, she had not a thought for personal safety. "Wassamatter, you never saw facial piercings before?" she said to an astonished warrior as she blew him away. "It's called a *Mohawk!*" she screamed at another, and ran him through.

The citizens, not close enough to smell her breath, were inspired, and took up arms.

The Beast Men didn't have a chance.

So it was that Jane Carter ended up, against her will, on the Imperial throne, with a scantily clad male crouching to either side of her, pouting and caressing her calves. A thousand servants rushed to do her every bidding. She was respected, revered, adored. Statues were erected in her honor.

The irony of this did not escape her.

3
Li
Lithium
6.941

Lithium for God

God sits weeping in the corner. His seraphim gently try to coax Him (God can't be made do anything He doesn't want to do, so He has to be coaxed) into taking His lithium. He requires five gigatons a day, just to function.

The Big Guy's bipolar disorder is the worst-kept secret in existence. Everyone knows how in a fit of mania he created the Heavens and the Earth in only six days. Everyone knows how, in depressive mode, he fell into such a slough of despond that he let that cretinous little toady, Morningstar, torment Job, who was the most faithful of His servants.

The problem is, God just won't admit He has a problem. He blames it all on Adam, for the apple, or on Eve, for tempting Adam. He blames it on Herod, on Hitler, on the Trilateral Commission, on anything but Himself.

"Open wide," sing the Seraphim, cheered on by all the Heavenly ranks and powers. "Take your nice medicine."

God buries His face in His hands. "Such children I have," he weeps. "*Oy gevalt*, what did I do to deserve such a family?"

"Why don't you try a little smiting?" the seraphim urge. "Wouldn't that be nice? Bangkok! It's the sexual transmitted disease capital of the world. It would be a great way of getting the Word out."

But God doesn't listen.

Meanwhile, the Kid comes slouching into Heaven (He's having a difficult adolescence), holds up His pierced hands, and says, "Look what they did to me down there! I am, like, so bummed out."

The Archangel Michael casts a jaundiced look his way. "So's your old man," he sneers.

4

Be
Beryllium
9.0122

A Beryl as Big as the Ritz

On the Gem Planet, the rarest and most valued of all substances is dirt. Just the scrapings from beneath a hobo's nails would bring enough to support him for a year.

Across the desert plains of sheer diamond wealthy tourists come. They wear slitted goggles to protect themselves from the blinding reflections of the sun. There is a red glint ahead. That is their goal.

Hexagonal in cross-section, it is the largest outcrop of pure beryl on the planet. Artisans have carved rooms into it, with fluted columns and elaborate fireplaces, and there are banquet halls and ballrooms as well. At the break of day, when the sun shines through the Ruby Mountains and dawn lases across the plains, the guests are escorted to basement safe-rooms carved from darkest emerald. Even there, the walls glimmer elegantly.

But it is not beauty that brings visitors to the Ritz-Beryllium. Beauty, for them, is so common as to be invisible.

They come for the squalor.

At the Ritz-Beryllium, maids place dust-bunnies under the beds each morning. There is always a film of grime on the bureaus and the smudgy patina of fingerprints on the mirrors. The bathtubs all have rings

It costs a fortune to stay there but, oh, it's worth it! Nowhere else on the Gem Planet can you experience uncleanliness in such joyous profusion. Many people spend a lifetime saving, in order to exult for a weekend in the kind of slovenliness that only the Ritz-Beryllium can provide. Not a one has ever been known to regret the expenditure.

On the Gem Planet, if you call somebody a filthy name, they smile and thank you.

5
B
Boron
10.811

Francis, Child of Scorn

Francis the Talking Mule awoke from a long and dreamless night to find himself part of a twenty-mule team, hauling ore from the borax mines in Death Valley.

It was a waking nightmare.

"This can't be happening to me!" he cried. "I'm an *artiste!* Okay, so I'm a comedian. Maybe I work in the movies rather than the legitimate theater. Still, art is art. I've dedicated my life to the elevation of the spirit. What am I doing here?"

The other mules looked at him as if he were mad. One of them snickered. Another brayed. It was obvious to Francis that he was the only talking mule there.

The mule skinner strode up. He was a tall cowboy with a long, somewhat lopsided face. He looked strangely familiar. "All right, Mr. Mule," he said. "What's all this fuss about?"

"You've got to call my agent! There's been a terrible mistake!"

"No mistake, Mr. Mule." The cowboy shook his head, making his jowls quiver. There was a twinkle in his eye. "I'm afraid you died, and were reincarnated."

"But why as a *mule*, of all things? I can sing! I can dance! I've brightened the lives of millions!"

"You were given an extraordinary opportunity and, let's be honest, you wasted it. It happens all the time. People get what they deserve. I myself used to be the president of the United States, and now I'm back where I belong. You don't see me complaining, do you? And if you did, what good would it do me?"

"My God," Francis breathed. "You're really Ronald—"

"Shhh." The cowboy put a finger to his lips. "Let's not tempt me with false pride. Now pull yourself together. It's time we got to work."

"Isn't there any way out of this?"

"Work hard, do your honest best, and when you die, you'll be reborn as a better mule. Then do it again in your next life. If you keep at it long enough, well," the cowboy spread his hands, "there's no telling where you might end up."

It was good advice, if hard to hear. Francis knuckled down. The route from the Harmony Borax Works to Mojave covered 165 miles, one fifty-mile stretch of which was waterless. The roads were primitive, and in the summer the heat soared as high as 130°. But he bore up under it. He was, underneath all the glitter and the gab, a good soul.

Sometimes, he and the cowboy spent the evening together, talking about the old days in Hollywood.

Other times, though, a sense of the monstrous injustice of life would swell up in him, and he'd cry out, "Why must I be stuck in this ludicrous body? Why couldn't I have been reborn as Olivier or Gielgud?"

The cowboy always took it in stride. "There you go again, Mr. Mule," he'd say, with a little smile. "There you go again."

They're Made of Carbon

"They're made of carbon."

"Ew!"

"Linked to hydrogen and oxygen atoms, mostly."

"Yuk."

"Look, Seraph, it's not our job to pass judgment. Our job is to seek out all intelligent races and welcome them into the Galactic Ekumen, thus bringing them the benefits of peace, prosperity, immortality, blah blah blah. I can read your thoughts and, quite frankly, they're not worthy of you."

"Yes, but ... physical matter! If it were merely one of the lower spiritual levels, I'd understand, but they're completely embedded in mundane reality. It's just too much to ask."

"What do you suggest we do?"

"Let's give them a miss. There's a lovely little group mind in ..."

"Not a chance."

"Look at this place! There must be millions of souls here! Billions! How can they live so close together? They're hardly worth the trouble."

"Ours not to question why, Seraph. Ours but to do or fall into spiritual error."

"But ... very well, sir."

"Good. Now, establish contact with them. I'm anxious to get this over and done with."

"I've been trying, sir. Since we first arrived here. I foresaw my lapse into near-disobedience, and began the communications process as an act of contrition."

"Good lad. What do they say?"

"Nothing, sir. I don't think they can hear me."

"What?! How long have you been trying?"

"Since we arrived here. Three thousand years."

"And they haven't responded?"

"They're made out of carbon. They don't appear to pick up ethereal vibrations very well."

"What have you been broadcasting?"

"The Eschatologica Universalis. It's very popular among emergent spiritual civilizations. Then I tried the Milky Way Sutra. No response."

"Too elevated. Try something less highbrow."

"I've also been broadcasting a few self-evident ethical systems, 'Life is Sacred,' 'The Ecstasy of Existence,' baby stuff like that. They don't seem able to pick up on them either."

"Simplify, simplify! Reduce the Message to its least common denominator, and push it with everything you've got. Once we've made contact, we can build on that."

"All right, chief. Hey—you there! Have a nice day! *Have a nice day!*"

(with apologies to Terry Bisson)

7

N

Nitrogen

14.0067

Nitrogen: An Introduction

Nitrogen is a colorless, odorless, tasteless gaseous element. It neither burns nor supports combustion. It is relatively inactive, though it does combine with oxygen and some active metals. It is a constituent of ammonia, nitric acid, amino acids, and many fertilizers, dyes, and explosives.

Roughly four-fifths of Earth's atmosphere is nitrogen. Its moderating effect on the far more reactive oxygen is what makes life possible on this planet. It is present in all living matter, chiefly in proteins, and may therefore be considered essential to life. Nitrogen fixation is the process of extracting free nitrogen from the air by combining it with other elements, either by chemical means or by bacterial action. Bacterial agents, called nitrogen fixers, are found in the nodules of leguminous plants, such as alfalfa, peas, and soybeans.

There are many commercial means of nitrogen fixation. These include the cyanamid process for producing ammonia, the arc process for nitric acid, and the Haber process, in which ammonia is synthesized through direct combination of nitrogen and hydrogen.

Elves and gnomes, working out of a factory complex in Trenton, New Jersey, employ vast quantities of nitrogen in the daily generation of night.

Whence the name.

8

O

Oxygen

15.9994

Oxygen Planets

Of all life-bearing worlds, oxygen planets are the rarest and most valuable.

Stars, of course, are as common as dirt, and as filthy with life. Sundwellers as large as Australia and as small as the state of New Jersey infest the surface of even so common a star as our own. A red giant like Aldebaran holds so many living creatures on its surface that it's a wonder any light gets out at all. Most of the leaders and industrialists of the Known Universe come from red giants.

Next after stars come the gas giants. Ammonia atmospheres, for some reason, are particularly conducive to intelligent life. Since ammonia-based life forms are almost universally floaters, lacking even rudimentary manipulating limbs, they lead lives of the mind. Most of the philosophers and theologians of the Known Universe come from gas giants.

Third in line are the vacuum planets. Free of the corrosive effects of an atmosphere, an enormous variety of magnetic, gravitic, and energy-based civilizations have arisen. These are the artisan races—the merchants, mechanics, and artists.

Last of all, and most valued, are the oxygen planets, often called the "Goldilocks worlds" because in order to hold the extensive oceans that make such atmospheres stable, they must be neither too far from their suns nor too near, but can only exist at a "just right" distance.

The oxygen planets are valued for their intelligent species. An oxygen race typically employs tools, shows enormous ingenuity under stress, is fiercely loyal and yet irrepressibly playful, and is capable of being taught almost any skill.

They make great pets.

9

F

Fluorine

18.9984

The Message

The John Birch Society was right. Fluoridation *isa* plot. Not of Communists, however.

Toothpaste, it turns out, is a virus from outer space.

Impossibly distant, wonderfully evolved aliens detected our existence long eons ago. Benevolent creatures of ethereal purity, they resolved to do what they could to improve our lives. At enormous cost they devised viral messengers of great subtlety and launched them across the void.

For a million years, the dust floated between stars. Hominids emerged from the African veldt and, as foreseen, built civilizations. Finally, in the late 1950s and early 1960s, the viral messengers arrived, floating down unnoticed from the night sky.

Nanomachines unpacked themselves. Insights spontaneously blossomed within human brains. By a series of what seemed logical decisions, fluoride was introduced into the drinking water.

Unfortunately, the aliens had conquered their baser instincts so long ago that they had completely forgotten about war, racism, aggression, and all the myriad woes we humans bring upon ourselves. These they could easily have cured. But they knew nothing of them. So they gave us the greatest gift they could think of.

The purpose of fluoridation is to prevent tooth decay.

House Rules

I met the Devil in Las Vegas. He lives there full-time now. He says the light is good for his skin. We walked down the Strip at midnight, the neon reflected in his wraparound shades, and as we walked, I saw how his people adored him. Hookers seized his hand and kissed it fervently. Croupiers genuflected as he passed.

"They called Elvis the King," I remarked. "But really, the title belongs to you."

"Oh, pshaw!" the Devil said, pleased. "What a sycophantic little toady you are! You must be hoping to sell me your soul."

"Well ..."

"I gave up on that. Got out of the direct sales end of the business entirely. Too much quibbling about clauses and legalisms. I was spending all my time with lawyers! That's no way to live."

"You don't collect souls anymore?"

"I didn't say *that*. Here, let me show how it's done now."

We went into a casino thronged with people playing the slots. Now and again, bells would ring and a player would scoop up coins and feed them back into the machine, emotionless as a robot.

"The machines are rigged to return a fixed percentage of the take." The Devil gestured toward the roulette wheel. "There are thirty-eight numbers, including the zero and double-zero. If you win, we pay off thirty-six to one. In the long run, the house always wins. It's like a tax on people who don't understand mathematics."

"Sometimes people hit the jackpot, though."

"Yes, and they're always welcome back. We'll send a private jet for them, if that's what it takes. They invariably end up broke and in hock to the IRS within the year."

"This is legal?"

"Oh, yes. Let me show you." He led me to the poker tables. I couldn't help noticing how grim and joyless all the players looked. "Poker is one of those rare games where, if you keep track of what cards have been played and maintain a cool head, the odds favor a skilled player."

He placed his hand on a card-player's shoulder. "Excuse me, sir. You've been counting the cards. I'm afraid you'll have to leave."

The man looked up belligerently. "Yeah, so what? I ..."

The Devil's eyes glowed red. "Don't make me call the police."

The man left quickly.

"And that's all there is to it?" I asked, as we left the casino.

"That's all. Our clientele leave in despair—a sin in itself—and in order to get back into the game, they'll commit any atrocity imaginable. The odds always favor the house."

"And then you take their souls to Hell."

"Oh, not any more. We've modernized." The Devil indicated one of the neon signs. "Look inside the tube. See? Those are souls in torment. What a marvelous, jittery light they give off. It makes you subliminally nervous, and that in turn makes you more likely to gamble."

I don't mind admitting that actually looking at the tormented souls made me a little nervous myself. Suddenly, this whole thing didn't seem such a good idea after all. And since the Devil wasn't buying ... figured I might as well cut my losses.

"Well," I said uneasily, "I'll be seeing you."

The Devil showed his teeth in a wide smile. "Oh, I'd bet money on it."

11
Na
Sodium
22.9898

Electric Pickles

Try it yourself: in a dim room, impale a kosher dill pickle on two prongs, each of which is attached to one wire from an electric cord. Then (observing all possible safety precautions) plug it in.

Briefly, little happens. You hear a hum. You smell a stench. A wisp of smoke floats upward from the tormented pickle.

And then—what's this? One end of the pickle *lights up!* It sheds a lovely flickering yellow glow. In the darkened room, the effect is entrancing.

It's a moment of wonder and magic.

Here's the explanation: the atoms of NaCl salt in the pickle's brine exist as free-floating sodium and chlorine ions within the watery interstices of its cells. When electricity is pumped through the system, the sodium ions rush to one pole of your homemade device to seize an electron and make themselves complete. The ion rises one quantum level up and is made temporarily complete.

Like a not-fully-competent juggler, however, the sodium ion can seize the extra electron but cannot hold it. The ion falls from the higher energy quantum to the lower, releasing a packet of light in the process. Thus the lovely yellow glow.

Shakespeare was an electric pickle, and so was Virginia Woolf when she wrote *A Room of One's Own*. They were hooked into the psychic electricity of their times. They took in more energy than one person can hold. They went up a quantum. They fell back down. They shed light.

Try it yourself: plug into the Zeitgeist. Feel the power. Now create a work of art. Shed the light.

See how easy it is? I told you so.

The pickle, unfortunately, is not much good for anything after this exercise. Throw it out.

12
Mg
Magnesium
24.312

Under's Game

The spaceships burned brightly in the vacuum between stars. They were a hundred miles long at a minimum. The tiny ships of the Space Force darted in and out among the flaming wrecks, dodging the Invader fleet's death rays when they could and dying when they couldn't. Courage was on the side of the Space Force. Numbers were on the side of the Invaders.

"It doesn't make any sense," Under said petulantly. "How can they burn in outer space? There's no air there. It's stupid."

"The hulls are made of pure magnesium. The Invaders breathe oxygen. One direct hit, and the two combine. What's so hard to believe about that?" his instructor asked the young military genius. "Let's test your skill. Take the controls. Show me how good you are."

Under picked up the pad, shifted forces along seven vectors at once, launched plasma torpedoes, and suddenly a full quarter of the Invader fleet was in flames. Then he threw the controller aside. "It's a dumb game. Aren't there any Cheez Doodles left?" He dug a hand under the sofa cushions, searching

"Please," the instructor begged, tears in his eyes. He was a general, and the one who had convinced the Government of Earth to put all its defenses under the control of one prepubescent boy. The Invaders were better strategists than any adult human, and better tacticians as well. It only made sense to hand over all the Space Force to one boy and then (so he wouldn't freeze up under the responsibility) keep the reality of the situation from him. "You can have ice cream if you win. With sprinkles!"

Under's eyes gleamed. He snatched up the game pad, and launched a series of commands. The Space Force twisted, turned ... and fled into hyperspace.

The Invader fleet followed.

"We're doomed!" the general wailed. All the vector lines on the display converged upon one small blue-and-white planet. "You're leading the Invaders straight toward Earth."

"That's what they think too." Under bit his lip and twisted on the couch. His thumbs were a blur. "But watch this. Our ships burn every ounce of fuel they've got and—there's no way the enemy can predict this—their vectors take them right through the Sun's corona. Their hulls are plasteel—they can take the heat. That gives them a slingshot gravity assist of ten gees. Just within performance tolerance of the crews."

"But now they can't maneuver!"

"They don't have to. Watch. The last of our ships is leaving the sun's chromosphere, and the first of theirs is entering."

There was a glint of light as the first Invader ship vaporized.

"See? Magnesium hulls, just like you said. Up in flames, and bye-bye Invaders!" He tossed the controls to the general. "Here, catch!"

The general stood mesmerized as the Invader menace evanesced, one instant a threat to human existence and the next instant only a memory.

"This is a great moment for humanity," he said, tears in his eyes. His thumb moved, inputting orders for the Space Force. Then he frowned. "They're not responding. They're still headed for Earth!"

"Yeah, pretty neat, huh? I figured they're out of fuel, anyway, so they might as well go out with a bang. So I aimed them straight at Home Base."

"But this is terrible! At those speeds, they'll hit us with all the force of so many nuclear bombs!"

"Hell," Under said. "It's only a game."

13
Al
Aluminum
26.9815

Aluminum Foil

The only way to protect yourself from mind-control beams is to wrap your head in aluminum foil. Amateurs usually do a half-assed job of this. They cover the tops of their heads, leaving their eyes uncovered, or their nostrils. Don't make this mistake! Devise a periscope for your eyes, or a small television screen cabled to a camera duct-taped to your shoulder. Run rubber hoses up your nostrils so you can breathe. After a day or so, you stop noticing the smell. Swathe your head completely in three to five layers of foil.

There are many benefits to freeing yourself from mind-control beams. Loved ones speak to you more directly. Religious missionaries stop approaching you in airports. Most importantly, the world begins at last to make sense.

Even if you're under the influence of mind-control beams, it's possible to set yourself free. The first step is to admit that there's something wrong with reality. Not you—reality! Begin by paying attention to what you're doing. Ask yourself if it makes sense. That haircut you got the other day ... What were you thinking? Those clothes in your closet that you've never gotten around to wearing ... Would a sane person have spent money on plaid trousers? You don't even *like* plaid.

Stop! Right now! *What are you doing?* Reading an online story about mind-control beams and plaid trousers? Does that make any sense to you at all?

I didn't think so.

The roll of Alcoa is in the kitchen, in the drawer by the sink. Go get it. Now. Cover your head entirely, using all of the roll just to be safe. Be sure it's loose enough so you can breathe. Leave a tiny slit to see through, about as wide as a line of type on your computer monitor.

Lean your head forward, close to the CRT, so you can read these words, a line at a time. Are you ready? Good.

Now let's talk about the dangers of exposure to computer monitors.

14
Si
Silicon
28.0855

Programmable Breasts

The new Wonderbreasts have just been released and there's no escaping the ads: on billboards, bulging out of evening gowns and glowing bright as neon. Over the radio, playing seductive music from subcutaneous woofers and tweeters. The TV commercials demonstrating their prehensile abilities are eye-popping.

Reality moved beyond satire decades ago.

Women no longer look even remotely human. They have no noses to speak of. Their lips are enormous. Their eyes, modeled after those of the latest anime sex-heroines, originally belonged to cows.

By today's standards, I am a pervert.

I have what is now classified as a retro-fetish. I desire only natural women, with soft breasts, the hips God gave them, and gently curving stomachs incapable of flashing real-time downloads of the Dow Jones Industrial Average.

At night, I prowl the bars in seedy parts of town, looking for women so poor and marginalized they've never mutilated themselves. I take them home and touch their perfect bodies, and on a good night I convince them, briefly, that they are beautiful.

But then the grey light of morning comes, returning to them their ugliness and self-loathing. They slink away, miserable and ashamed. Nothing I can say will change their minds.

These are the women who turn me on. These are the women I love. Someday, I'll find one who'll stay.

Blockade Runners

At night the water in the Ocean of Dreams is phosphorescent. Our galleon trails long swirls of blue and white and green in its wake. The creatures that dwell below are phosphorescent as well, in places and patches, according to their nature. Sometimes a great serpent will glide by beneath us, its spots all in a line as regular as the windows of a passing train. But larger, much larger! So large it can take an hour to pass us.

None of the crew are native to this life. I was a stockbroker in the waking lands. I never expected to become a privateer. I never expected to rise through the ranks to become captain. And I certainly never expected I'd someday operate under a letter of marque from Lucifer himself.

But these things happen.

We were positioned offshore of Arcadian Greece when we spotted three fat merchanters trying to ride the winds past our blockade. In quick order we engaged with them, and sent two ships to the bottom of the sea. The third we grappled with and boarded. After a brief but furious hand-to-hand, we were victorious. We took its treasure to add to our own, and scuttled the ship, sending it to join its sisters below.

That night (it is always night on the Ocean of Dreams), Will, the cabin boy, came to see me. "There's a noise in the for'ard storage, sir."

"Is there, now?" I seized my pistol. "Lead the way."

So we caught Midshipman Homer in the treasure locker. He'd broken open a chest of Stories and was greedily filling his pockets. The phosphorescence from within lit up his gloating face. How his expression changed when I cocked the pistol and laid it to his head!

All the crew turned out for the discipline. I stripped Homer of his rank. Then I blinded him with my own two thumbs. "You wanted Story?" I thrust a handful of the stuff into his mouth. "Eat it!"

Then I had him flung overboard.

Several nights later, young Will approached me and said, "It seems a harsh punishment on Midship—mean, on Mister Homer."

"He was within swimming distance of Greece—just. If he guessed the right direction, he might have made it ashore. He could find work as a storyteller, then. The pay's not good, but it'll keep him alive."

"Why do we live like this? What makes Stories so important?"

I sighed. "I don't know, lad. It's possible that they make people stronger or wiser or better, somehow. The Devil doesn't want them to get through, and that's good enough for the likes of us."

Which was the end of that. But I had my eye on young Will now. He seemed a likely lad. So the next time we made port (in a dingy wooden London, in Renaissance England), I gave him a pistol and cutlass, and set him to guard the treasure room while I went ashore for provisions.

"Keep a sharp eye out," I told the boy, "and *don't* get any smart ideas."

The phosphorescent glow of our hoarded Stories bathed the lad in uncertain light. He stood to attention and said, "I won't, sir."

"See that you don't, Master Shakespeare," I said. "See that you don't."

Vitriol

Oil of vitriol is nothing but concentrated sulfuric acid. But, applied lightly, it can blister the skin, and, when heated, it will eat its way through steel. Loaded into a pen, it can be used to write reviews.

The terrorist organization known as the International Brotherhood of Critics grades its vitriol from one to ten. Grade one vitriol is known informally as "break-down-in-tears." Grade two is called "punch-the-wall-and-kick-the-cat." And so on. Grade ten vitriol—the best there is—is sometimes called "career-killer" and other times "cause-for-suicide." So much depends on the skill with which it is deployed!

Vitriol is distilled by the critics themselves from the embittered blood of writers. A quick kill, therefore, produces a weak vitriol. It is for this reason that a skilled critic will leaven his criticism with small praise in order to keep his victims alive and suffering for as many years as he can. It is for this reason that the critics refer to their distillation as the Great Art.

The vitriol of London is very, very strong. Connoisseurs delight in the vitriol of Paris. But for good old-fashioned ridding the world of talent, there's just no beating the vitriol of New York.

17
Cl
Chlorine
35.453

Seven Days of Creation

On Monday, we filled the swimming pool with sterile water and added the self-replicating long-chain polymers. It was a shoestring operation from the first. The lab used to be a public swimming pool, before we bought it, cleaned it, and rigged it with our makeshift instrumentation. We added some sugar to the mix, and let things simmer.

Tuesday, the pool was filled to capacity with nanotechnic life forms. We set about teaching them first how to compute, and then how to reason. Since they reproduced at the rate of thousands of generations per hour, evolutionary pressures quickly boosted their intelligence.

Wednesday, the nanotech organisms achieved full consciousness. We broke out the champagne. Perhaps a few of us had too much. Dr. Wilkinson was discovered in a supply closet with a young lab tech. Who could blame her, though? We were all feeling exultant.

Thursday, the pool-life demanded Internet access. By the time we discovered they were dealing with our corporate rivals and buying stock on margin, they were heavily invested in new technology, and owned several valuable patents. Dr. Wilkinson had a stern talk with them about the necessity of going through proper channels.

Friday, we discovered that the lab had been bought by a consortium that turned out to be a blind for our pool life. It felt a little strange to be working for our own experiment, but Dr. Wilkinson called us all together and reminded us that we live in a capitalist system, and that it's useless to complain about its rules. The pool life were so pleased with her speech that they gave her a cash bonus.

Saturday, decadence set in. A memo from our superiors directed us to devote all efforts toward the development of water-soluble drugs. A second memo declared that henceforth all lab personnel were to dress appropriately for Victorian Lingerie Tuesdays. A third memo stated that Dr. Wilkinson was required to change her name to Fifi. Morale plummeted.

On Sunday, the pool life declared its intent to take over the world and enslave all of humanity. Dr. Wilkinson poured fifteen gallons of Clorox into the pool, killing everything within. We gathered, aghast, at the pool's edge, and stared down at its browning contents. Somebody began to cry.

"Don't feel sorry for *them*," Dr. Wilkinson said angrily. "They were just scum."

- [download Contemporary Metaethics: An Introduction \(2nd Edition\)](#)
- [read online The Arsenic Century: How Victorian Britain was Poisoned at Home, Work, and Play book](#)
- [Beginning Windows Phone App Development pdf, azw \(kindle\), epub, doc, mobi](#)
- [Always Running: La Vida Loca: Gang Days in L.A. book](#)
- [read online Can Science End War \(New Human Frontier\)](#)
- [read online Easy Fish: Simple, Tasty Fish and Seafood Recipes \(Weight Watchers Mini Series\)](#)

- <http://cavalldecartro.highlandagency.es/library/Casebook.pdf>
- <http://aseasonedman.com/ebooks/The-Arsenic-Century--How-Victorian-Britain-was-Poisoned-at-Home--Work--and-Play.pdf>
- <http://betsy.wesleychapelcomputerrepair.com/library/Bin-Laden-s-Legacy--Why-We-re-Still-Losing-the-War-on-Terror.pdf>
- <http://bestarthritiscare.com/library/Rumi---Past-and-Present--East-and-West--The-Life--Teachings--and-Poetry-of-Jalal-al-Din-Rumi.pdf>
- <http://patrickvincitore.com/?ebooks/Guide-to-Essential-Math--A-Review-for-Physics--Chemistry-and-Engineering-Students--2nd-Edition-.pdf>
- <http://weddingcellist.com/lib/Easy-Fish--Simple--Tasty-Fish-and-Seafood-Recipes--Weight-Watchers-Mini-Series-.pdf>