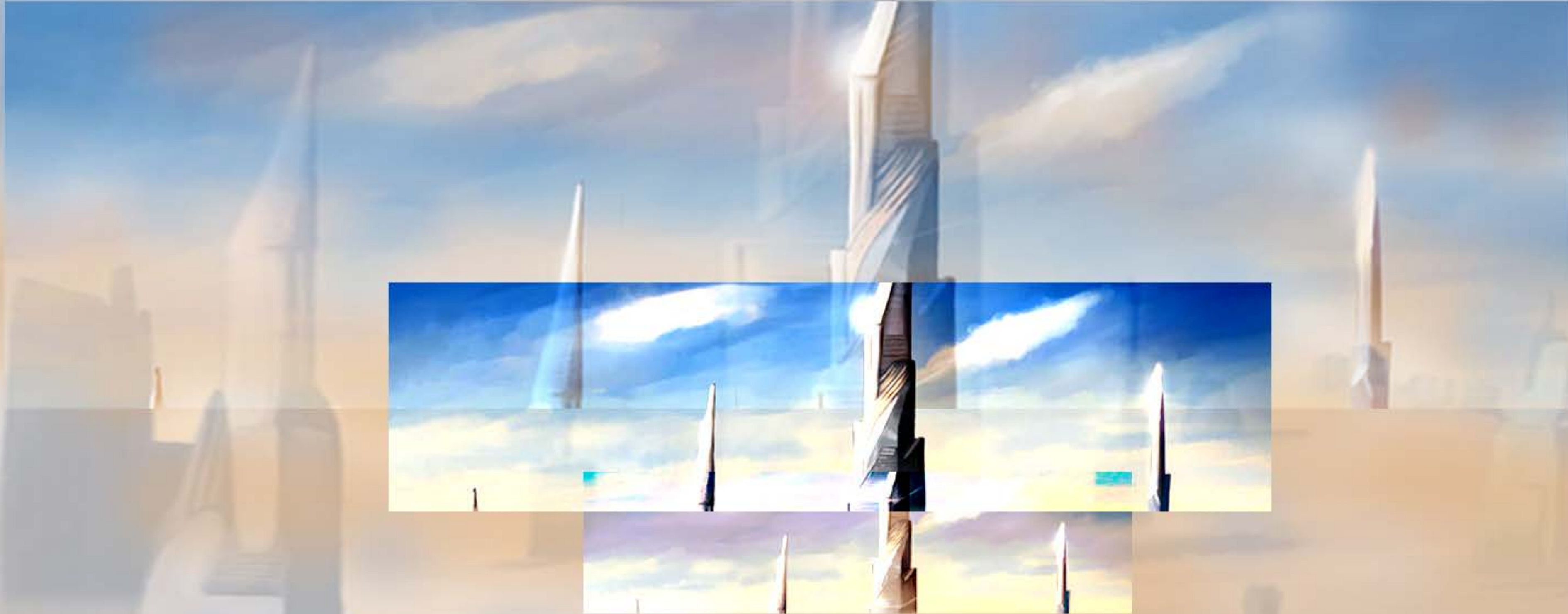


sigma #431 February 2022





I used to build an amusement park in my backyard. Out in the cavity left by the earthmovers at the end of track after they poured the concrete driveway. Under the massive sumac tree. Over the years the would-be “Old General Redwood” put tremendous pressure on the left-hand wall of the neighbor’s garage. It was not a tree to love. I wonder whether either the dripping resinous plywood of the carport wall or the living wood of the trunk has survived.

I would begin in May when the rolls of ride tickets would go on sale, like chuck-a-luck carnival tokens, in the rooms of all the Penn Hills School District Buildings. It was a big day, Penn Hills Kennywood Picnic Day. Big enough for me to get out the coal shovel and a pick to reshape the shady three-sided earthen backyard pit into the wonder of an amusement park.

Oh, not so you would ever know it. It was not there for any to perceive the wonder I imbued. This was a private adventure that did not include my brother, next-door cousins, or friends from down the street. In one corner was the frisson of the dark ride, scary tactile strings of hanging thread, an imagined skeleton made out of stripped deciduous branches. Several freshly dug paths at the far end of the hole would leave you breathless, and your blue jeans coated muckle brown in the mud as you slipped down the chute. The precipitous drop mid-branch off the lower tree perch was the peer of any Coney Island Parachute Jump.

I built it each year in the spring, eternal return, out of mud and my mind. It’s the way I ever built anything. I will not list the geographies which have been shaved, shivered, and sundered under my construction. After a time, and out of practicality, I shaped the earth less and less. I retired to the realm of my mind. It is less satisfying but more practical.

Now all begins to grow out of my fiction, my memoir and my articles - a mish-mosh of genre drumming à la the grand Hammet, the overwhelming Chandler, a soupçon, of Proust, a stylish bit Emerson, a tip of Tolstoy , a twist of Joyce, a dip of Dostoevski, a shaker of Melville, un petit morceau of Hugo, and a twist of Twain. I am well aware they are a cadre of old white guys. They weren’t always, of course. And the thing is, they wrote with something more than grandeur. The second thing is there are so many more, but I cannot go on, Baldwin, naming, Langer, all day, Didion, even though, Cather, I want to.

I am well aware there is not a science fiction writer among them. (Want me to string those influences out? You might be surprised.) But it is the basis of what I begin and is daily growing. I urge you to start from your base from those you emulate. The influences on my writing, like my yearly amusement park excavation, are of no use to you. The construction was my homage to spring, as was my visit to

the Kennywood each May. Though I no longer walk those same macadam pathways between the oiled smell of mechanical rides and the digital bleep of the new, I am still driven by the spirit. Whatever you love, whatever influences your thought, whatever makes you smile, will lead you to live, read, and write.

Among the riddles of words, puzzles of paragraphs, passions of pages, and mixture of mash-ups is a pleasing romp through Sigma this month. It includes two works of fiction, *(our first fiction and both authors, Eric Davin and Paul Levverson, are past first place winners of the Parsec Short Story Contest, and both are the only two-time winners of the award - after their second wins, the contest rules were changed, saying that "past winners" were ineligible to apply to the contest)*, a poem, a mind map exhibition, a message from the Parsec President, several articles filled with thought for you to ponder, and information for you to peruse and, as always, as much news about the activities of Parsec as we can find.

Welcome aboard and bon voyage.

Our contributors and where to find more of them. *(Click on the photo to go to this month's page.)*



Eric Leif Davin

I've published dozens of stories (Galaxy's Edge has a new one, but I don't know when it'll be published), many dozens of essays and articles, over 20 books (some self-published, some by academic presses, some by mainstream, some in commercial "best of year" anthologies, etc.), and won awards for my fiction, my journalism, and my historical articles."
(Just take a look at my Amazon page!)
https://www.amazon.com/s?k=eric+leif+davin&crid=1XW30OY31VHU2&srefix=eric+leif+davin%2Caps%2C52&ref=nb_sb_noss



Francis Graham

is emeritus faculty in the Physics Dept. of Kent State University. He is the author of professional papers and several books.



William Hall

is and has been secretary of the Parsec Meeting Group for many years. We appreciate his meeting minute notes each month and the many articles he has written for Sigma



Kevin Hayes

is the Preseient of Parsec, Inc., which is the umbrella company for the Program, Conference Workshop, Publishing Committees of Parsec.



Alan Irvine

"The first stories I learned to tell were ghost stories, and ghost stories have remained one of my favorite types of stories. I tell a lot of them, particularly in October. And so people often ask me why ghost stories? "

We hope you'll get a chance to have Alan answer the question for you in a story telling session soooooon.

Meanwhile visit him at the following:

<https://alanirvine.com>

<https://www.facebook.com/AlanIrvineStoryteller>



Larry Ivkovich

I'm a former IT Systems Analyst with a Bachelor of Fine Arts degree from West Virginia University. How I went from art to computers is a differnt story but, suffice to say, about forty years ago, I found another creative path to walk - writing fiction, particularly speculative fiction.

<https://www.larryivkovich.com>

<https://www.larryivkovich.com/my-story>



Mary Soon Lee

Mary Soon Lee was born and raised in London, but has lived in Pittsburgh for over twenty years. Her latest books are from opposite ends of the poetry spectrum: "Elemental Haiku," containing haiku for the periodic table, and "The Sign of the Dragon," an epic fantasy with Chinese elements, winner of the 2021 Elgin Award. She hides her online presence with a cryptically named website (marysoonlee.com) and an equally cryptic Twitter account (@MarySoonLee).



Barton Levenson

Author of
[Another Century](#)
[Recovering Gretel](#)
[The Argo Incident](#)



Scot Noel

is a content writer for websites, blogs, social media, e-newsletters, and the like. Speculative fiction has always been his obsession, resulting in a Writers of the Future 2nd place win in 1990, a 7-year career in computer game development, and a handful of published stories, ranging from far future and zombie fiction to the tale of a fairy sheriff fighting an evil dragon. He serves as the editor and publisher of [DreamForge Anvil](#) and [DreamForge Magazine](#).

In addition to DreamForge, Scot's editorial efforts include the anthology Worlds of Light & Darkness (The Best of DreamForge and Space & Time) along with Angela Yuriko Smith. Available on Amazon and from other fine book sellers. Booklist called it "Genius." Who are we to argue?



John Thomson

is the editor of Triangulation, a publication of Parsec Ink. This year's theme is

Meeting Minutes - January 15, 2022

Bill Hall - Secretary



For nearly two hours our Zoom got 18 participants, with DreamForge's Scot Noel moderating very efficiently. The topic of the day was costuming and our three guest experts were Pam Smith (of Harrisburg), Karen Schnaubelt, and Lisa Ashton.

We learned that we are going for a live Confluence 2022 and that registration is now open. Dealers will want to contact Mary Tabasko. Our anthology "Triangulation: Habitats" is now available and we are encouraged to buy it through Amazon Smile so as to give Parsec extra support. The Parsec short story contest theme is "Hearth, Song, and Table" and accepting submissions up through May 1.

We got a small report on behalf of John Thompson, Brandon Ketchum, and Jerome Stueart, who all went to DisCon III. There was still some wrestling with Covid compliance, evident in the fact that the world SF convention of 2019 saw over 6,500 participants, whereas this time that number was down to 2,300. Details were shared in December's Sigma. WorldCon remains accessible, as the next one will be in Chicago at the start of September.

I promoted our own Barton Paul Levenson's new novel "Another Century." Set around 1900 on a parallel Earth, it is the life adventure of one Thorvald Winchester, an Englishman who helps operate gigantic difference engines. A bit more than simply "steampunk," more of a study in faith set against the march of tyranny, this may be the strongest writing I've seen from Barton – and I've been reading him for half a century. DreamForge is launching a YouTube Channel and Donald Firesmith has put out "Hellholes 3" and a horror anthology. Mary Soon Lee was sadly unavailable.

Karen Schnaubelt's costuming has taken on cosplay based on the Mirror Universe as seen in "Star Trek: Discovery." She's been involved in fandom since 1973, as well as "The Whole Costume Catalog," which turned out to be an over-clever title. Is it like "The Whole Earth Catalog"? Can you order from it? No to both questions. Lisa Ashton does Civil War era costuming, as well as costumes for book covers, and uses color to buck a trend towards grayness. Pam Smith was the newest of our costumers, starting just six years ago, yet highly prolific, having appeared as a dragon, a school bus, and Mary Poppins. Otherwise known as "Dame Dahlia," she is fond of comic book superhero cosplay for charity and helping kids. She has used 3-D printing, although our own Joe Newcomer calls it 4-D printing, the fourth dimension being hours of time involved in obtaining one item.

For our next meeting we will have Bruce McCallister, author of "Dream Baby," which just appeared in DreamForge 9.

Finally, as shocking tragedy once more draws the eyes of the world towards Pittsburgh, we are at least grateful that the collapse of the Fern Hollow Bridge (which I always thought of as the Frick Park Bridge) got nobody killed. Kipling warned us about the twain of East and West never meeting, and entropy has just enforced that.

RETURN

Bulletin from the Board

by Kevin Hayes
President Parsec

There are a lot of goals in front of us as Parsec. We have made changes and there are further changes that await. Some of what awaits us is obvious--such as filing income tax forms and maintaining our 501(c)(3) status and pursuing the goals as set forth by our mission. Easy. Other goals may not be as obvious, such as a revision of our by-laws, perhaps forming another standing committee for a lecture series and workshop. We have to wait and see. And that calls into question how we as Parsec can accomplish those goals.

Many elements will come into play in order to pursue, much less accomplish, any of those goals. Reasonability, imagination, inspiration all come to mind. Understanding, and willingness to work together are also important. And as a header under which most of these attributes present themselves is the notion of responsiveness. Answering a question when asked, taking action when a problem is faced.

I expect we have all been in a situation where we procrastinated. I know I have developed quite a talent for it. If it's something that can be put off, I'm pretty good at doing that. But moving forward as Parsec, I don't know that we can afford to do that. We have to be responsive. Collecting and collating information so flyers can be sent. Collecting mail from our Post Office Box--because some people send in dues or Confluence membership fees by check. And I know how I feel when I've paid for something by check, and it takes months before the check is cashed. If I feel that frustrated, I can only imagine how anyone else might feel.

We have work to do and choices to make. None of this can be done if we aren't responsive. We're planning Confluence in July. Are you coming? We can make better plans if we hear from you. There will be a Parsec meeting in March where we will solicit panel ideas. The more people who are interested and show up, the more good ideas we are likely to get. Parsec Ink Triangulation is looking for stories for the theme "Energy." Do you know writers? Are you a writer? John Thompson, the editor, has extended the submission deadline to the end of March. If you are responsive, they may have more stories than they know what to do with. Information to be shared, actions to be obtained. For Parsec to remain Parsec, we absolutely need responsiveness. Parsec isn't just the few of us on committees, it is all of us who pay dues. It's all of us who read the books and watch the movies and like to talk to other people about them. It's all of us who draw and paint or who view and appreciate the images. Parsec is all of us. And it wouldn't be what it is without all of us.

It's being responsive that keeps us going. We did some massive restructuring of the too many bank accounts associated with Parsec Inc. and it could never have been accomplished without the responsiveness of more people than just the members of the board. But now it's been done and we make progress. Responsiveness pays. Financial obligations need to be met and without responsiveness to meet those obligations, Parsec Inc. could cease to be.

I wish I had some deep and stirring insight to add to all this. All I can say is we can't have the attitude that we'll get to it eventually. None of this happens without our direct involvement and a response when needed. This is how we make progress. This is how we support Parsec.

[RETURN](#)

CONFLUENCE

July 29, 30 & 31, 2022!

Our Guest of Honor will be Neil Clarke

Neil Clarke is the editor of the Hugo and World Fantasy Award-winning *Clarkesworld Magazine* and several anthologies, including the Best Science Fiction of the Year series. He has been a finalist for the Hugo Award for Best Editor (Short Form) nine times, won the Chesley Award for Best Art Director three times, and received the Solstice Award from SFWA in 2019. He currently lives in NJ with his wife and two sons. www.neil-clarke.com



Our Featured Music Guest will be Tim Griffin

Tim Griffin is an award-winning teacher, musician, and storyteller with four albums out and more on the way. When he's not filking he runs an educational nonprofit called GriffinEd, using geeky music to teach science, math, history, and other stuff to grades K-8th online for free. Laugh, sing along, and learn (really!) about bugs, boogers, and particle physics at www.GriffinEd.org.



Our location will be the Sheraton Pittsburgh Airport Hotel

1160 Thorn Run Road
Coraopolis, PA 15108
412-262-2400 / 866-716-8134

[\[REGISTER HERE\]](#)

Visit the Confluence website for more information: www.confluence-sff.org

Triangulation Update

John Thompson

Parsec Ink has extended this year's Triangulation submission deadline to the end of March 2022. Our target publication date has not changed and we still expect our final decisions to be made by April 30.

[Submissions for Triangulation: Energy](#) have been low compared to previous editions and we've been scratching our heads over it since December. We've had a couple of snags and issues with the call-for-sub apps and we're not sure how big a factor that is.

RETURN

The 2022 Parsec Inc. Short Story Contest is open to submissions

The Parsec Short Story contest is sponsored by Parsec Inc., a 501(c)(3) organization.
The theme this year is "Hearth, Song, and Table."

This year we've added a new category and prize for authors ages 19 and under

Contest opens on January 1st and closes on May 1st 2022 at 11:59:59 pm EST.

Cash prizes and never any fee to enter!

Visit the [Short Story Contest](#) page for more information.

Parsec Inc Board of Directors

Kevin M. Hayes (President / Representative for the Confluence conference standing committee) 10/2021
Open position (Vice President)
Open position (Secretary)
Karen Yun-Lutz (Treasurer / Representative for the Program standing committee) 10/2021
Patrick Ropp (Member at Large / Representative for the Alpha Workshop standing committee) 11/2018
John Thompson (Member at Large / Representative for the Parsec Ink Publishing standing committee) 10/2021
Scot Noel (Member at Large) 4/2019
Larisa VanWinkle (Corporate Bookkeeper)

Parsec Membership

Membership is **\$25** annually and begins the month you pay. Additional family members living at the same address can be added for \$5 each. To join, please [click here](#) to pay via PayPal or credit card (you do not need a PayPal account) or send a check with your name, address, email.
Parsec Membership
P.O. Box 3681
Pittsburgh, PA 15230-3681

[Visit the Parsec Website](#)

Parsec Inc has four standing committees

Program committee (monthly meeting) officers:
Scot and Jane Noel: (Co-Chairpersons)
Karen Yun-Lutz (Vice-Chair)
William Hall (Secretary)
Sarah Wade (Treasurer)
Kevin M. Hayes (Commentator)
Joe Coluccio (Sigma editor)
Conference committee (Confluence) officers:
Kevin M. Hayes (Chairperson)
Karen Yun-Lutz (Secretary)
Mark Stewart (Treasurer)
Publishing committee (Parsec Ink) officers:
Diane Turnshek (Chairperson / Co-editor)
John Thompson (Treasurer / Co-editor)
Storm Walden (Vice-Chair / Assistant editor)
Workshop committee
The workshop committee is currently in the works.

Parsec Meeting February 19, 2022

Guest Speaker - Bruce McAllister

Our guest at the Parsec ZOOM meeting in February is Bruce McAllister.

Bruce is a writer of fantasy and science fiction known primarily for his short fiction. Bruce will engage us with anecdotes of interest to fans, as well as people and events that have affected his fifty+ year career. And we'll hear a poem or two of Bruce's.

His short stories have appeared in many fantasy and science fiction magazines, including Analog and Asimov's, in theme anthologies, college readers and "year's best" anthologies, including Best American Short Stories 2007, guest-edited by Stephen King.

Bruce's first novel was *Humanity Prime*, published by Ace Books in Terry Carr's "Ace Specials" series.

His second novel, *Dream Baby*, published by TOR in 1988, was based on the Hugo, Nebula, and Locus-finalist novelette of the same name. A National Endowment for the Arts fellowship winner, *Dream Baby* was called a "stunning tour de force" by Publishers Weekly.

After being away from writing in the 90's, Bruce returned to the field in 2003 with the short story "Kin," a 2006 Hugo finalist.

In 2007 Golden Gryphon Press published a career-spanning collection of his short science fiction, *The Girl Who Loved Animals and Other Stories*.

Bruce has a new short story "Sidha" appearing DreamForge Magazine, Issue 9, just out on Amazon. The same short story has been chosen by Aeon Press for a "Best of Bruce McAllister" anthology "STEALING GOD and Other Stories." coming out early in 2022.

Sidha has also been listed on Tangent's Recommended Reading List for 2021.

At Bruce McAllister Coaching, Bruce has been a writing coach and consultant on a wide range of popular books for major and smaller publishers and scientific books published by scholarly presses, including Pulitzer and National Book Award nominees; and a facilitator of autobiography and memoir workshops.

Here is a video: Fantastic Fiction at KGB with Bruce McAllister & Nalo Hopkinson

<https://www.youtube.com/watch?v=N8hOBtJ-A98>

Please register for our ZOOM meeting at

<https://bit.ly/Parsec-Meeting>

After registering, you will receive a confirmation email containing information about joining the meeting.



What Cacti Read

Mary Soon Lee

(first published in Strange Horizons)

**Etymology, dictionaries, grammars
pertaining to plural formation:**

**one cowboy, too many cowboys,
one cowgirl, not enough cowgirls**

**one lone horseman riding into sunset,
four horsemen summoning apocalypse**

**one ox calmly yielding to two oxen
while sheep stubbornly remain sheep**

**mice not mouses, lice not louses,
but one goose begets more geese**

**and in place of meese or mooses
roam the remnants of the moose**

**just one last prickly conundrum:
is it cactus, cacti, or cactusses?**

RETURN

THE MOON MACHINES OF FELIX BACH

Francis Graham

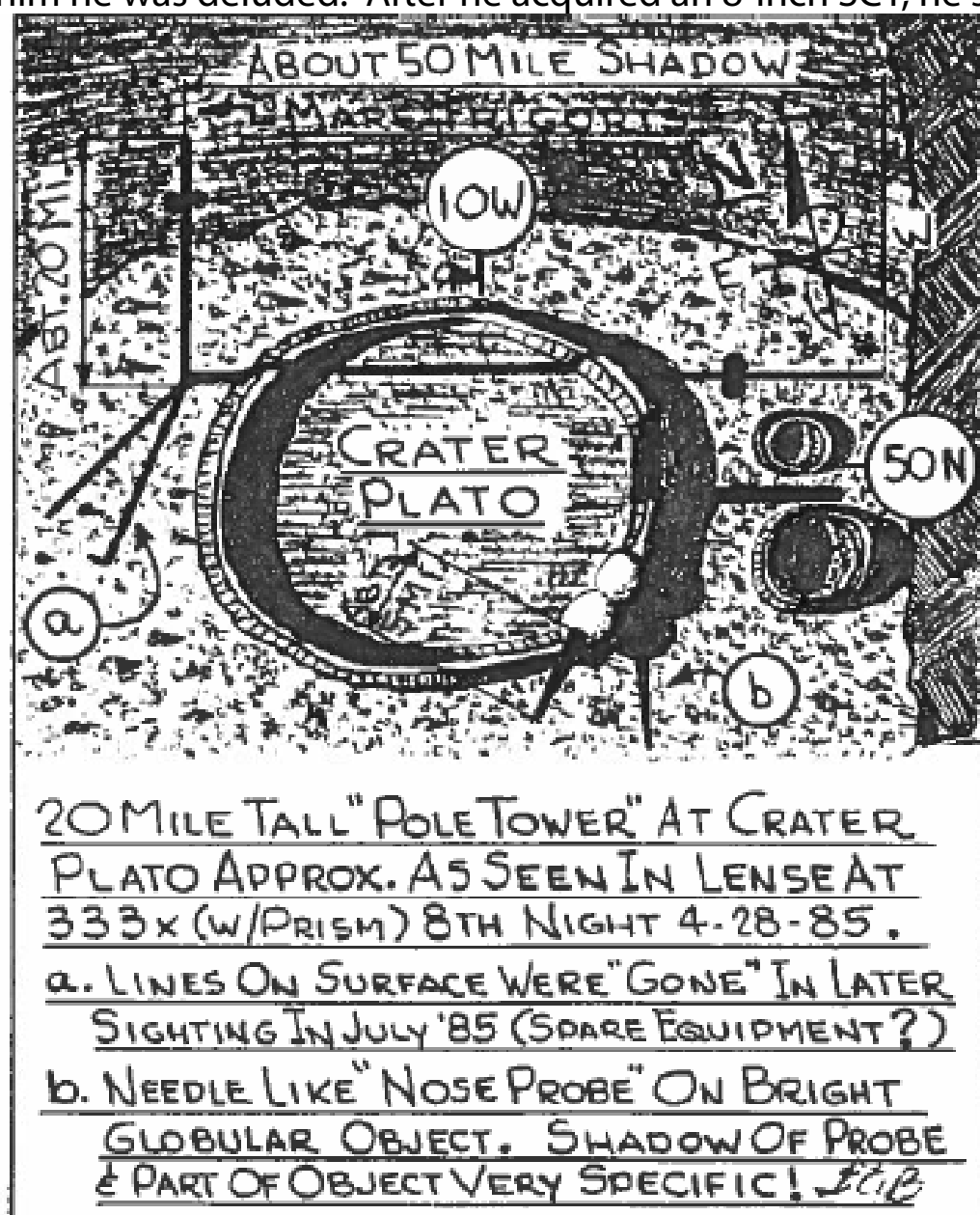
Kent State University

I need to put this into context.

Carl Sagan suggested in 1962 that alien artifacts might be found on the unchanging surface of the Moon, in an interview in *Stars and Stripes* magazine, perhaps left there in the last 4 billion years. I have participated in searches for them with my colleague Alexei Arkhipov of the Radio Astronomy Institute of the Ukraine in Kharkov, and a member of the SETI Institute. Our searches, which were refined over the years, were looking for things tens of meters in size in spacecraft images or searches with large telescopes. We had the highest standards for pronouncing a candidate likely. We have some “maybes” which we looked at more closely when higher resolution Moon images came to be. Our searches were **negative**. Searches by lunar probes, such as Chang’e and the Lunar Reconnaissance Orbiter over the last decade have been at very high resolution (LRO = 0.5 meters) but the only artifacts they located were sent there or left by human beings.

So, if there are any *alien* artifacts or “mementoes” on the Moon, they are very small. There are likely none, but of course, it is always hard to prove a negative and we may want to keep our eyes open. It was a question worth looking into, it was investigated with rigorous scientific criteria, and turned out negative, at least for objects > 1 meter on the surface. Task complete at that level. Of course, there still may be an undetected chemical signature of some sort, as I said, keep your eyes open. But the possibility seems now more remote.

But that was not the belief of former Greensburg, Pennsylvania resident Felix A. Bach (1930-2011). He looked through a 60 mm diameter refractor telescope and saw many large machines on the Moon. They were gigantic: tens to hundreds of *kilometers* in size. Easily seen! When I was editor of *Selenology* there arose a lively correspondence with Mr. Bach from 1986 to 1988. There was no convincing him he was deluded. After he acquired an 8-inch SCT, he saw even more Moon machines.



Various Moon Machines sketched by Felix A. Bach.

Felix was a star football player at Greensburg-Salem High School in the mid-1950's and a partner and co-founder of the former Craft Metals of Greensburg. He was happily married and had several children. He did not wear aluminum foil, but his Moon machines were a persistent delusion that puzzles me to exist in an otherwise very responsible man.

Since I did not see the machines, with much more powerful telescopes, I must be part of "The Conspiracy", he concluded. "The Conspiracy" of course included NASA, the U.S. Air Force, Amateur Astronomer clubs, and just about everyone else who had any business with the Moon. Finally, I agreed to publish a "Moon Machines" article by Bach in *Selenology*, which I then edited, provided it was understood I write a rebuttal in the next issue or so, which I did. Some American Lunar Society members thought the article damaged the reputation of *Selenology* even with the rebuttal. But I did it if only to alert others to this new brand of pseudoscience. My reasoning was that the readers would want to know about this.

Bach's retort to my rebuttal, published as a letter to the editor, was fast and furious : "Shame on You, Francis Graham!".

The world then was new to this kind of denialism.



A giant Totem Pole near the Crater Mee, according to Bach.

Bach was not the first to see these Moon machines with small Earth-based telescopes. The pioneer in this delusionary activity was Jack Swaney of Las Vegas, Nevada who wrote a series of absurdist articles in *Fate* magazine, claiming to see awash ships, long levers, bridges, castles, junkpiles, cranes, etc on the Moon with his small backyard telescope. Indeed, you can see the features Swaney identifies, and with proper sun angle and a great deal of imagination you might delude yourself also that they are structures and Moon machines. But, let the sun angle be different, and they reveal themselves to be geological features. However Bach had a ready explanation: the Moon machines moved. Sigh. There was no winning them over.

Bach is no longer with us, having passed at age 81 in 2011. However, Bach's Moon Machines, together with Swaney's, live long and prosper on the internet. Al McDowell featured Bach in his 2012 book *Uncommon Knowledge*, together with chapters such as: "There Was no Big Bang", "The Facts Disprove Relativity", and "The Universe is Not Expanding". After devoting a chapter on the Moon Machines, McDowell goes on to expostulate his own (utterly wrong) theory of gravity. More recently, in 2020, Ingo Swann featured pages of Bach

in his book on how UFOs interacted with Earthlings. Swann's approach to UFOs and Moon Machines is quasi-religious and leaves the trappings of science farrrr behind. There is no switching off Bach.

Poor Felix. He would never see the Moon for the magnificent desolation it is. It was to him a haven for gigantic alien machines. I tried in my correspondence to convince him otherwise, but to no avail. He was not yet published when we first corresponded and so he had no face-saving stake in his delusion. Nor was he under the spell of some flying saucer hoaxmeister as was moon machiner Fred Steckling under the spell of George Adamski. It pains me to believe that others fall for this, in one of the planet's most scientifically illiterate nations. It is a result of the national tendency to raise children to be consumers rather than critical thinkers.

A lot has happened since Bach's passing eleven years ago. Not Moon Machines only, but flat Earths, political Q-anon schemes, deep state conspiracies, religious aberrations, and craziness so thick that skeptical commentators cannot even begin to keep up with it.

But hope is eternal for better.

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[RETURN](#)

Almost

Barton Paul Levenson

A man walked into a doctor's office. A stalk of celery hung from one nostril, a scallion from the other, a banana from one ear, and a carrot from the other ear. "Doctor, what's wrong with me?" he asked plaintively.

"You're crazy," the doctor said.

A tiger chased a man over a cliff. The man clung to roots in the cliff side. Above him waited the hungry tiger, and below, a deadly drop.

A single, wild strawberry grew in the cliff face before him. With one hand, he plucked the strawberry. Then he climbed up the cliff, whipped the strawberry at the tiger, and knocked it out cold.

Phaeton begged Apollo to let him drive the god's solar chariot, but the sun god knew the horses were too much for a mortal man to control. But Phaeton's constant pleading wore him down. Apollo gave his consent, and his half-mortal son took the reins of the solar chariot. He zoomed out of the driveway and smacked right into a concrete Jersey barrier.

Two Buddhist monks, pledged never to touch a woman, walked through the forest. They came on a Buddhist nun stopped by a river. One of the monks carried her across on his back.

Later, the other monk, still stewing about the incident, said, "Look! You know we are not supposed to touch women! How could you do such a thing?"

"All right, all right," the other monk said. He raced back to the river, found the nun, and threw her in the water.

Two men hiking through Africa met a leopard. One sat down and took off his hiking boots. He began to tie on running shoes instead.

"What are you doing?" his companion asked. "You can't outrun a leopard!"

"Don't need to," the first man said. And he kicked the leopard in the crotch and took its wallet.

Young George Washington had been given a hatchet for his birthday. Unable to restrain himself, he chopped down the new cherry tree in the front yard.

Later, his father asked who had done such a thing. George said, "Father, I cannot tell a lie. I did it with my little hatchet."

His father screamed, beat the child brutally, and sent him upstairs without supper.

A traveling knight-errant came on a woman trapped in a high tower. He kept careful watch, and learned that she was imprisoned there by a witch. The witch came and went by night, each time instructing the woman, "Rapunzel, Rapunzel, let down your long hair!" and then climbing thereupon.

One morning, the man tried it himself. "Rapunzel, Rapunzel, let down your long hair!"

"Okey-dokey," Rapunzel said. She let her hair down and the man began to climb. Rapunzel screamed. "How much do you weigh, a million pounds? Get off me!"

A Native American grandfather told his grandson, "There are two wolves fighting within you. One feeds on love, peace, and contentment. The other feeds on anger, hatred, and humiliation."

"Which one will win?" the boy asked.

"The gray one."

[**RETURN**](#)



BRIEF BIOS

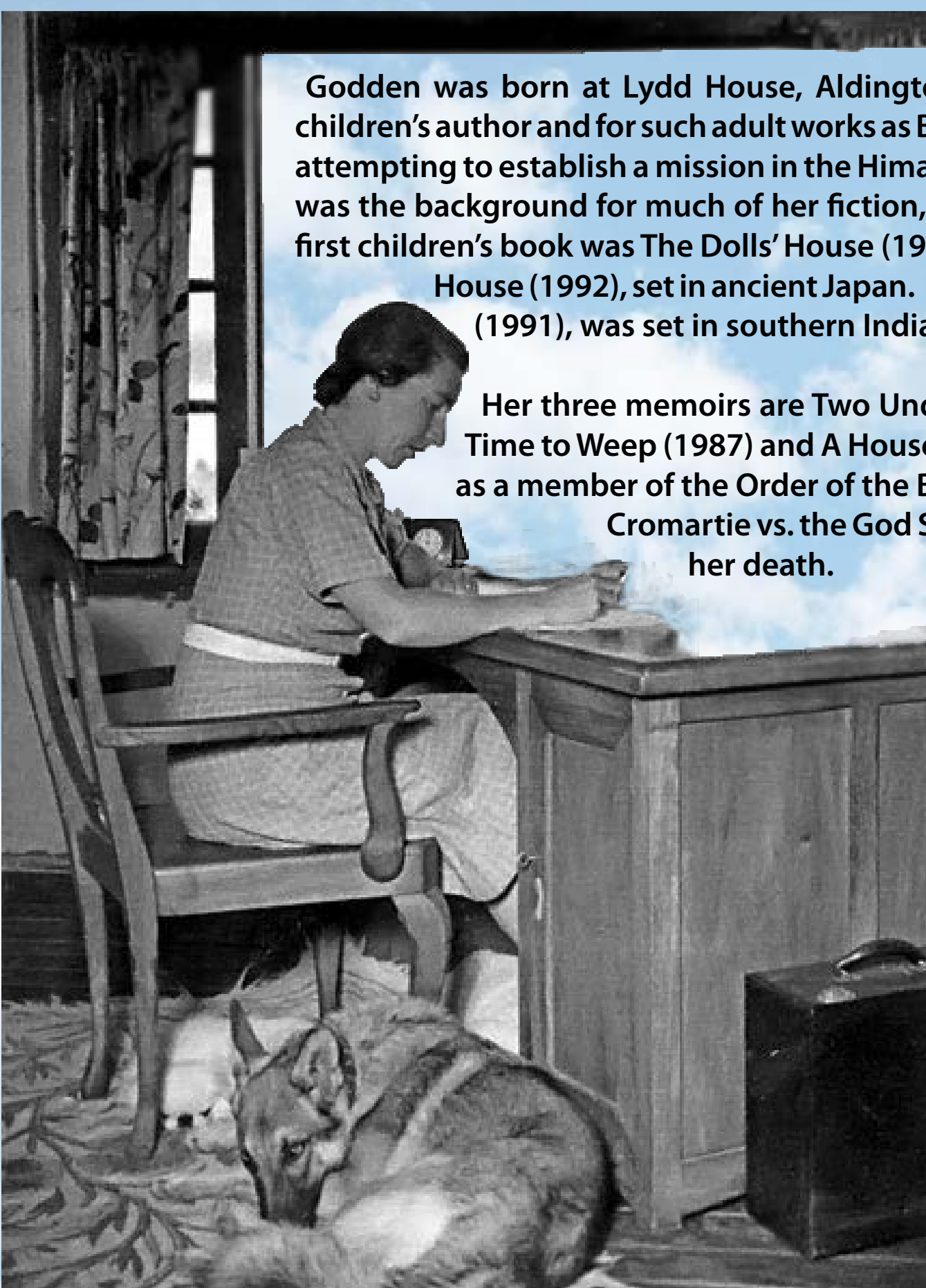
by eric leif davin



(Margaret) Rumer Godden 1907-1998

Godden was born at Lydd House, Aldington, Kent, England. She is best known as a children's author and for such adult works as *Black Narcissus* (1939), about a group of nuns attempting to establish a mission in the Himalayan region. India, where she long resided, was the background for much of her fiction, although she later settled in Scotland. Her first children's book was *The Dolls' House* (1947). One of her last was *Great Grandfather's House* (1992), set in ancient Japan. Her romance novel, *Coromandel Sea Change* (1991), was set in southern India.

Her three memoirs are *Two Under the Indian Sun* and *A Time to Dance, No Time to Weep* (1987) and *A House with Four Rooms* (1989). She was inducted as a member of the Order of the British Empire (OBE) in 1993. Her 21st novel, *Cromartie vs. the God Shiva*, was published in 1997, the year before her death.



The Perils (and Promises) of Prequels

By Alan Irvine

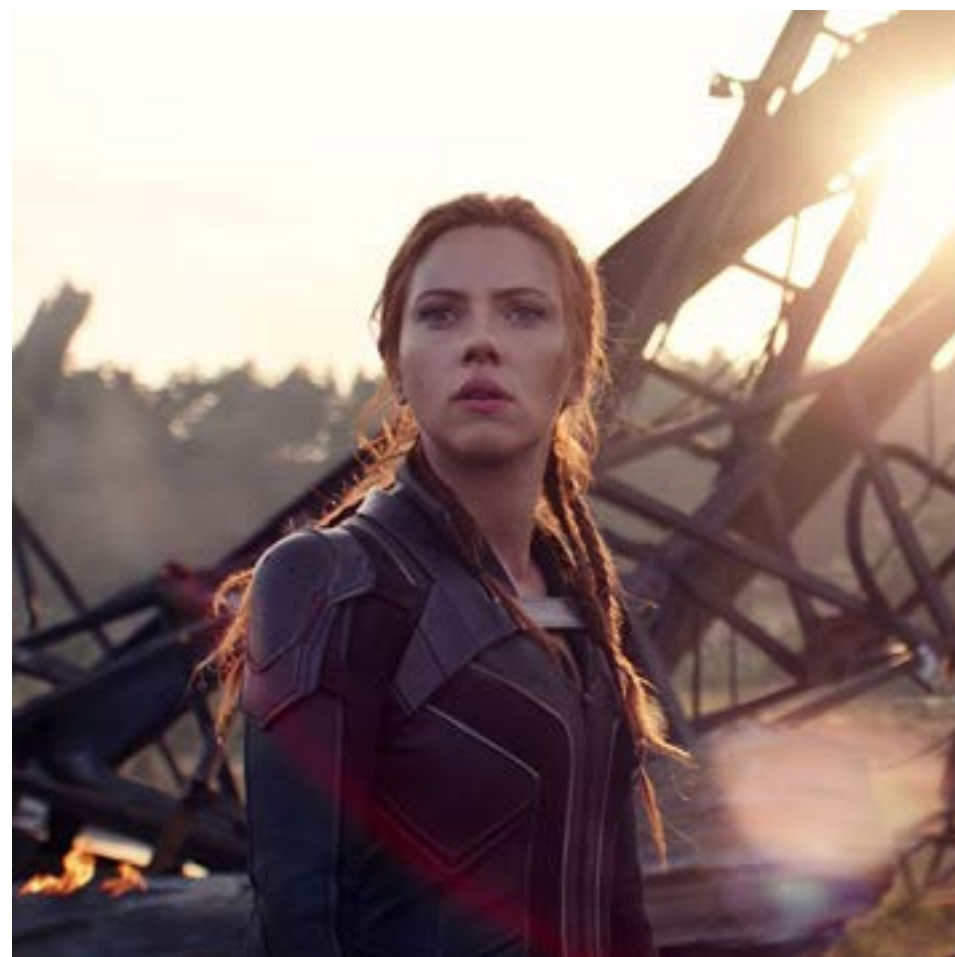
adapted from essays originally posted on [storystuff.blog](https://www.storystuff.blog)

In the last year, I dove into a couple of high profile prequels – those stories that come before the original story. In doing so, I ended up thinking about the nature of prequels – about the problems they often have and how they can easily go wrong, but also of their potential to bring new understanding and perspectives to the original work they spun off of.

The more problematic of the pair was Black Widow, the first movie my daughter and I finally got to see after the big Lock-Down in a real movie theater. On a big screen. The way movies, especially Superhero action movies are meant to be seen. We loved it. We are both fans of the character of Black Widow/Natasha Romanov and were delighted that she finally got a movie of her own, especially one where she does not have to just stand off to side and let the big boys of the Marvel Cinematic Universe hog the spotlight (looking at you Tony Stark). We both loved the fact that Natasha's past, always glossed over in previous movies, is finally filled in.

But...

As we discussed the movie afterwards, my daughter pointed out one big problem. Not with the movie itself so much, but with how it fits in with the rest of the MCU. Or rather, how it not only does not fit in, but, does, in fact, undermine one incredibly important event in Black Widow's life.



(And here is where I need to put in the Spoiler Warning. I will be discussing key events of both Black Widow and Avengers: Endgame. If you haven't seen both movies, proceed at your own risk. And later I will discuss key events in The Ballad of Songbirds and Snakes. Same warning.)

Natasha has always been portrayed as a character essentially alone, lacking the connections others have, but not necessarily by choice. She does have a special bond with the character of Clint Barton/Hawkeye. This connection has grown out of the way Clint and his family have adopted her as their own, giving her the family and connections she does not have, but desires. So has her membership in the Avengers. At the beginning of Avengers: Endgame, we see Natasha holding a lonely vigil in the near empty Avengers headquarters, coordinating the activities of the other remaining heroes in a post-Thanos world that clearly has no need for the Avengers. When one of the other characters asks why she continues in this thankless task, she replies that the Avengers are her family. Later in the movie, we hit the key moment for Natasha. She and Clint have gone to retrieve one of the Infinity Stones, as part of a desperate bid to undo the damage Thanos did in the first half of the epic. When Clint and Natasha reach the stone they seek, they discover that only way to gain this Infinity Stone is to sacrifice something/someone you love. One of them must die for the other to achieve the stone. They argue over which one will live and which will die. In the end, Natasha sacrifices herself so that Clint can recover the stone, and it is very clear in the scene that her reason is that Clint has a family, a family that Thanos destroyed. A family that can be restored to life if Clint brings back the Infinity Stone. Natasha, on the other hand, does not, and since she is alone, she will sacrifice herself so that Clint will not be.

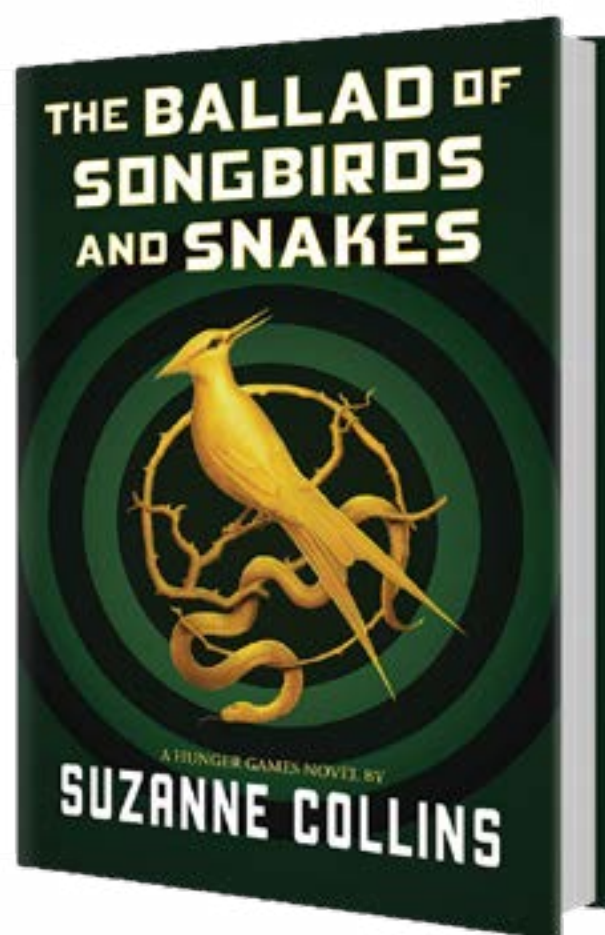
Natasha's lack of a family is at the core of why she commits her final act of heroism.

And then comes Black Widow, in which we discover that Natasha did have a family once. True, it was a made up family, mere cover for a Soviet espionage operation, but it felt real to her. And years later, when she reunites all the members of that family – a sister, a mother, a father –they feel like a family, they act like a family, and by the end of the movie, they have become a family. It is a great ending, both for the movie and for Natasha's story. She finally gets the family she has so long desired.

Except, of course, Black Widow occurs several years before Endgame. Before Natasha sacrifices herself because Clint has a family and

she does not. But, now it turns out that she does have a family. She has had a family for years. Her entire motivation for her sacrifice is gone, and the whole sequence is suddenly much weaker for it. The creators of Black Widow got so caught up in giving Natasha a happy ending, that they forgot that this movie was not really the ending, and so they blithely undermine the whole tragic sacrifice that ultimately defines Natasha as a hero.

And that is my problem with so many prequels – most of the time, the creators are really making a sequel, continuing the character's story in an innovative fashion, ignoring the fact that, by its nature, the prequel comes before the original, and so can not further a story that does not exist yet. Usually, of course, like with actual sequels, the creator ups the ante, making the menace even bigger than in the original (think of Indiana Jones and the Temple of Doom where Indy has to face two burly swordsmen, not just the one, puny swordsman from Raiders of the Lost Ark.) Sometimes we can try to ignore the awkward spots, but sometimes, like with this movie, the prequel actually undoes key events in the story that was created first, but chronologically comes second.



And so, it was with some trepidation, that I picked up The Ballad of Songbirds and Snakes, Suzanne Collins' prequel to The Hunger Games. I loved the original book and its sequels, as well as all four movies – my daughter and I have had many conversations and debates about the themes and characters and world – and I really did not want to read about how the child Katniss Everdeen fought in some other, even bigger gladiatorial game years before she fought in the Hunger Games.

I need not have worried. Instead of trying to squeeze a new adventure into Katniss' already well developed back story, Collins chooses to focus on a much less developed character: President Coriolanus Snow, the villain of the original story. It is an intriguing choice given that Snow is a shadowy figure, lurking in the background, always the threat, but rarely actually appearing. What is his story? And why should we care? To answer these questions, Collins takes us way back, 64 years in fact, to the 10th annual Hunger Games when a teen-aged Coriolanus is desperately trying to salvage his family's fortunes and carve out some sort of future for himself. Along with his high-school classmates, he is tapped to act as a mentor for one of the tributes to the Hunger Games, Lucy Gray, a singer from District 12. The Gamemakers have introduced the concept of mentors as

a way of perhaps generating some interest in the Hunger Games, which are generally ignored, even in the Capitol. The events immediately preceding-during-after these Hunger Games turn out to be the crucial turning point in Coriolanus's life.

This focus allows Collins to take the greatest weakness of the prequel format and turn it into a strength. We know what road Coriolanus is going to choose in the end; we know who he will turn out to be. So Collins plays against this. She paints a sympathetic portrait of Coriolanus. I liked him, mostly. I found myself rooting for him to make the right choices. I wanted his growing love for Lucy Gray to work out well, even when I racked my brains for some way that it believably could. I winced when he gave in to the temptation to stab a friend in the back for his own advantage, but I took some comfort in the guilt he felt about it afterwards. More important than liking him, however, I grew to understand him. Coriolanus grew up during a horrific war and saw both his parents killed and his family's fortune destroyed. And though Capitol won that war, it did not immediately enjoy the fruits of victory. Even ten years on, much of the city is still in ruins (think London or Moscow after World War II and the years of deprivations even the victors of that war endured.) Opportunities of any sort are rare, and the remaining members of the Snow family are constantly teetering on the edge of financial and social ruin. Coriolanus has seen that, all too quickly, when they are pressed, people turn brutish and violent, and the strong destroy the weak. That was the lesson of the war. That is the lesson Coriolanus learns again when he enters the arena of the Hunger Games and confronts that brutality up close. Human nature is violence and war. Or is it? Lucy Gray offers a different vision. Left on their own, away from the oppression and greed of the powerful, people are decent. Lucy Gray and her friends live on the very fringes of society, in a family that they create for themselves, each one supporting the others. Human nature is decent when given the freedom to be so. Lucy offers Coriolanus a place in this world. Coriolanus wrestles with these opposing views, and in the end must decide which one is the truth.

By walking with Coriolanus through this struggle, we come to see him in a different light. Yes, the adult President Snow is powerful and autocratic, but now we can see that he is not a typical dictator, nor cardboard villain. He does not desire power for the sake of power. In truth, he does not desire power at all. Instead, he desires safety. Stability. A sense of control over the world. Power is simply the means to that end. Power allows you to control the world and keep the chaos at bay. President Snow does not oppose Katniss Everdeen because

he sees her as a threat to his power and position, he opposes her because he sees her as a threat to the safety and stability of the world. In his view, she is the bringer of chaos. Which, of course, she is.

In the end, then, *The Ballad of Songbirds and Snakes*, is not just another Katniss adventure, or even an excuse for another Hunger Games adventure. The book does more. It pushes us to rethink the original work. To consider it from a new angle. Now I want to read a new version of the Hunger Games trilogy told from the point of view of Coriolanus Snow. How does he react when, at the end of his life, he sees another tribute from District 12 capture the hearts of the people? What does he see that leads him to fear her? Does he recall Lucy Gray inviting him to escape his brutal world and flee to something more? And how does he react when the song “The Hanging Tree,” which Lucy Gray wrote for him, sang to him as that invitation, is turned into an anthem of the rebellion against him and the stability of his world?

In the end, the novel has me rethinking the original books, and entices me to reread them with this new insight. What came before is not what I thought it was.

And that is what a good prequel does best. Not continue the adventure and take it to new heights. That’s the job of a sequel. Not to violate the world of the original work, but to give us new information and perspective on the original. wA good prequel supports the original tale, while suggesting that all was not what we thought at first glance.



[RETURN](#)

The MYTHICA Film Series (2014 – 2016)

Review by Larry Ivkovich



Mythica: A Quest for Heroes

Mythica: The Dark Spore

Mythica: The Necromancer

Mythica: The Iron Crown

Mythica: The Godslayer

The five direct-to-video films that make up the *Mythica* series were initially started through a Kickstarter campaign by Arrowstorm Entertainment and filmed primarily in Utah. On the surface, the series is basically the usual fantasy quest/adventure with a team of mostly scruffy outcasts, but I really liked these movies.

They're not perfect. The CGI can be a little sketchy and some of the action scenes are clunkily staged. A couple of the actors (the villains) are over-the-top in their scenery-chewing but most of the acting, the costumes, settings, and makeup/non-CGI creature designs are pretty good. The stark landscapes of Utah add a real sense of a secondary world.

Kevin Sorbo (*Hercules: The Legendary Journeys*, *Andromeda*) executive produced at least part of the series and plays a mostly supporting, though important, role as the wizard Gojun Pye. Pye takes a young slave girl, Marek, under his wing to instruct her in magic. Marek, played by Melanie Stone (*Little Women*), is a budding necromancer (although the films' interpretation of this is somewhat different from the usual raising/talking/reanimating the dead stuff, though that's there too) and Pye senses greatness and power in her.

Marek meets Teela (British actress Nicola Posener) who needs help in finding her missing sister, a priestess, like Teela, abducted from their order's temple of the goddess (godDESS as Teela pronounces it. Love that British accent!). Her sister possesses a mysterious and dangerously powerful shard of an artifact called the Darkspore. If all the pieces of the Darkspore are recombined and fall into the wrong hands... well, you know. Those wrong hands are legion, chief among them the evil necromancer Szorlok (Mathew Mercer), one of the aforementioned scenery-chewers.

Marek escapes from her cruel slaver and, through various circumstances, teams up with Teela, soldier-warrior Thane (Adam Johnson), and half-human/half-elf thief, master archer, and womanizer Dagen (Jake Stormoen).

Yeah, I know, a lot of the common fantasy tropes are present in the series but it's action-packed and the characters are appealing and I found myself rooting for them and bummed out when... sorry, no spoilers! Stone, in particular, handles her role very well. Sorbo's not bad either.

So, there you have it, somewhat. I found this series while perusing the Roku streaming service movies and got into it right away. Good, violent, magical fun.



Abundance and Convergence

By Scot Noel

A version of this essay first appeared in DreamForge Magazine, Issue # 5

Perhaps the most accurate statement that can be made about the future is that it will be neither utopian nor apocalyptically dystopian. It will be filled with humans doing typically human things, from authoritarianism and war to civilization altering science and selfless philanthropy.

Even so, there is evidence that —as a whole— the human adventure is moving in a direction of abundance and convergence. Perhaps the most prosperous and utopian times in the history of our species.

Of course, there is a conspiracy afoot that prevents you from knowing this, and even when seeing the evidence, in failing to believe.

Is the truth being withheld by the media, covered up by governments, or suppressed by evil corporations? No, it's worse than that: it's you. You're human, and unfortunately that means the very substance of your mind and senses has been programmed over hundreds of millions of years to trigger at news of danger, rumors of failure, and threats real or imagined that may adversely impact your life.

Engage a mind so evolved with a world-spanning communications network, one so capable that you not only can —but absolutely will— hear of the latest insurgency in Chad, a military incursion in Ukraine, the most drug resistant bug in Bangladesh, and every new viral mutation running rampant across the face of the globe, and...

That mind will be overwhelmed, obsessed, and often depressed by the result.

There's no easy answer to this, any more than in dealing with our penchants for too many sweets and other substances whose joys may not surpass their deleterious effects.

So, taking our Eeyore nature in stride, what amazing things lie just around the corner, even while we hang our heads in gloom? While 94% of those polled in the U.S. think the world will stay the same or get worse, here are a few things to consider:

- Vaccines for COVID (despite all the paranoid hoo-ha) and malaria (have you heard of this?) are saving or set to save uncounted millions of lives and are part of a global, coordinated attention to health of a kind the world has not seen before. Let's hope it keeps going.
- Climate change is rewriting the narrative on injustice and inequality worldwide, bringing new awareness from leading nation-states and possibly new solutions to longstanding humanitarian challenges in the decades ahead.
- Billionaires are giving more. While it is both a cynical and controversial way of looking at it, the wealth of billionaires is growing faster than they can give it away, so they are. The Giving Pledge now has 231 signatories from 28 countries and is delivering the money and strategies to make real changes to humanitarian crises, worldwide.
- While the pandemic has provided some setbacks, global life expectancy has risen almost 3 years per decade, and child mortality has been cut in half since 1990.
- World GDP has increased 33% in the last decade.
- Solar energy has grown 10X in the same period.
- Renewable energy is now the cheapest option, without subsidies, undercutting fossil fuels 10 years ahead of schedule.
- Prime editing is a new DNA editing tool with the potential to correct 89% of genetic defects.
- 3D Printing is making customized prostheses cheaper and more capable than ever before and is now used for everything from building houses to crafting new rockets. (Habitat for Humanity 3D Printed its first home in Virginia near the end of 2021)
- A.I. is set to generate nearly \$3 trillion dollars in business and recover 6.2 billion productivity hours in 2021.

There's More...

A.I. is making rapid strides. The DeepMind software MuZero is able to play Atari and board games without pre-programmed rules, quickly becoming a superhuman master at whatever it tries.

Artificial Intelligence will soon expand into all areas of our lives, making health care far more effective than our current “sick care” paradigm, increasing global GDP in double digits. AI is also set to provide cheap autonomous transportation and delivery services, including autonomous flying cars like the EHang model demonstrated in January 2020 at an event hosted by the Governor of North Carolina at Kitty Hawk.

With 5G now being implemented and recent satellite cluster launches by SpaceX and OneWeb, every place on Earth will soon be connected to the web. Inexpensive phone and tablet technology will bring billions of new young minds from around the world into the accumulated knowledge of mankind online. That alone will set fire to advancements of which we can have no conception.

Commercial space is going mainstream at a rapid pace, with about 45 private companies developing orbital and space technologies.

This century has plenty of time left to see humanity become a multi-planet species. No one’s going to ask a government to pay for it. Entrepreneurs have reduced the cost and improved the tech, and it beckons like the challenge of Everest.

How many of these additional developments are you aware of?

Did you know a supercomputer developed a new drug, Halicin, with the potential to kill all antibiotic resistant superbugs?

Did you know paralyzed patients have been able to walk using a mind reading exoskeleton?

Did you know direct brain to broadband interfaces are scheduled for testing in humans soon?

That Google’s 54-qubit Sycamore processor performed a calculation in 200 seconds in 2019 that would have taken the world’s previously most powerful supercomputer 10,000 years?

Abundance and convergence. Many of these “breakthroughs” are happening now because technologies like computing and artificial intelligence are merging together, converging with sensors, networks, robots, VR, medicine, biology, and manufacturing.

This is creating new business models and economies. The result is an exponentially advancing potential for human greatness.

But What About?

But what the recent setbacks in global poverty and famine, the risk of climate change, rising authoritarianism, apocalyptic weaponry, terrorism, and superrich corporations and billionaires in command of all the world’s wealth?

Well, change at the pace and depth of experience before us is a terrible stressor to our ill-equipped minds, fragile institutions, and ancient biological heritage. We don’t get to inherit the stars with the ease of being handed the keys to our parents’ sports car.

There is a great deal to do, together, to fairly allocate the opportunities before us, and to usher in the next great age of humankind. Rather than turn against one another in our petty squabbles and childish fears, it is time to recognize the inherent and irreplaceable value in every single human on the face of the Earth, and beyond.

“Be aware that other people have equal significance. Give them the space to make their own choices, and let their choices count as you want them to let your choices count. Remember that excellence has no stopping point and keep on pursuing it. Make art that can last and that says something nobody else can say. Live the best life you can, and become the best self you can. You cannot know which of your actions is the lever that will move worlds.”

– Jo Walton, The Just City

Cyber Attack

Eric Leif Davin

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The Hackers were after her again. Dawn Cocks was surrounded by chaos. Alarms screamed, sparks flew, screens exploded into shards of glass. Somehow the Hackers had gotten into the pulpit and were smashing everything in sight. "Shut it down! Shut it down!" they chanted as they swung their sledgehammers at the computer consoles which filled the pulpit. Dawn spun and ran for the door. She couldn't reach it. Panic squeezed her heart as the Hackers came after her in a pack. She ran frantically, adrenalin pumping, but her feet sank into the mushy floor. Each attempt to lift a foot pushed her further down into the floor. She was sinking, sinking. The alarms screamed louder as she fought to keep her head above the engulfing quicksand of the floor. Her flailing hand came down on the jangling phone next to her bed. The pulpit alarm stopped as she pressed the receiver to her ear.

"Yeah," she said, fighting to clear the fog of sleep from her brain. Already the Hackers were fading into half remembered wisps.

"Get down here fast, Dawn, we got a problem!" It was Sam, her assistant down at the plant.

Dawn turned a bleary eye to the lit face of her night clock. Three A.M. "Can't it wait?"

"Sorry, Dawn, but the whole plant's shut down. We gotta get things moving before the suits shit their pants. We need you now!"

"What is it? Hackers?"

"Dunno. Could be. You tell us when you get here."

"OK, I'm on my way." Dawn hung up and fell back onto her pillow, glaring at the ceiling. Damn those Hackers! she thought. First they make my days a living hell, now they ruin my nights!

Dawn swung out of bed and flicked on her desktop computer. The pale glow of the screen lit up the bedroom darkness. She accessed the plant's mainframe, tapped in her password, and queried for a status report. The screen went dark and a message filled the screen with bright, pulsing letters. "Access denied to all but authorized personnel," it said.

Damn it! Dawn swore, I AM authorized personnel! She tapped in her password again and again the plant's mainframe denied her access. Damn! Looks like the Hackers might've wormed their way into the mainframe and sabotaged it somehow. She flicked off her desktop and went to the bathroom to splash cold water on her face.

As she sped down the freeway toward the lakeside steel mill, Dawn marshaled her thoughts, reviewing this latest job. It was perhaps her most frustrating. She'd been at it for almost a year and thought she'd at last gotten everything working smoothly. Production was up, costs were down, and, best of all, she'd eliminated the last bottleneck: workers. She was an industrial computer maven who specialized in wiring steel mills for maximum efficiency. It was because of people like her that the American steel industry was Numero Uno in the world, producing the highest quality steel at the lowest cost anywhere. Much of this production was in the myriad mini-mills, which had sprung up across the country like mushrooms after a warm summer rain. Most of these mills virtually ran themselves, thanks to mavens like Dawn.

The steel industry had come a long way since the collapse of the 20th century. Although actually, Dawn thought, the industry never really collapsed back then. Yeah, entire regions, like the Mon Valley around Pittsburgh, were wiped out as employment in the industry plummeted. But that just meant that the workforce was downsized as the companies became leaner and meaner. In the meantime, steel production climbed, breaking record after record, as fewer and fewer workers turned out more and more high quality steel in ghost factories employing only a handful of steelworkers. Computers handled most of what went on in the mills. In fact, it all could've been handled by computers, Dawn reminded herself, but for the damn steelworkers' union. And now the Hackers.

Dawn's first real battle with the union had been when she'd computerized the reheat furnace for the continuous caster system at Bethlehem's Sparrows Point plant. She could have programmed the computers even then to run the reheat furnace entirely by themselves, but the union raised hell. Enough of their members had already been turned out of the mills, the union honchos complained. We're not going to allow a mill with no workers at all!

So, Dawn dumbed down the computers so the union could have two workers per shift, six in all, who sat up in the pulpit overlooking the mill floor with their feet propped on the consoles, watching the computers run the furnace. And for this, the so-called steelworkers got \$175,000 a year each! Hell, they didn't even need a degree in anything to monitor the pulpit computers. The computers mostly ran themselves. The only reason the human workers were needed was to intervene when the computers were trying to do something new and different. But, Dawn could've even programmed the computers to handle those unique situations. But the union wanted jobs for their members.

But now those union members no longer had those "jobs." Of late Dawn had specialized in converting mills into totally autonomous operations. She'd worked on them all, making possible spotless, silent, efficiently productive steel mills. These ghost factories needed no humans at all. They ran themselves with no interference from union bureaucrats trying to featherbed the road to the future. It was the end of that dinosaur, the blue-collar worker.

Which is where the Hackers came in. The union claimed they didn't have anything to do with the Hackers, didn't know who they were. Maybe yes, maybe no. But they'd made Dawn's life hell. The Hackers had started with physical sabotage of the ghost plants. They'd tried to literally throw monkey wrenches into the works. What an appropriate word, "sabotage," Dawn thought. It came from the traditional wooden shoes that the Dutch once wore long ago, "sabots." When Dutch workers lacked monkey wrenches, they tossed a sabot into the works, thus "sabotaging" the machinery. And as long as there were even a handful of humans left in the plants, there were machine breakers, computer smashers. So, the companies got rid of them.

Which is when the viruses and worms started showing up in the computers. Seems at least some of the featherbedding steelworkers had learned something up in their computerized pulpits. While their brothers had been physically wrecking the machines, they'd been working on more sophisticated methods of shutting down the plants. They called themselves the Hackers, only these Hackers literally hacked apart any computer system they could work their way into. As soon as Dawn tracked down and eliminated one virus or worm and developed a vaccine against it, they figured out a still more devilishly clever infection for the system. It'd been hand-to-hand combat in cyberspace for months on end, flame wars in virtual reality, but

at last Dawn had beaten them, burned them out, inoculated her computers against all Hacker attacks. She'd made the system able to take care of itself, identify and eliminate all Hacker bugs, develop new defenses as the Hacker bugs mutated, repair itself. She'd built in a triple redundancy capability so that nothing could shut down the system, no matter how sophisticated, no matter how destructive.

Until now. Somehow, after all her effort, the Hackers had struck again.

As Dawn approached the plant, she saw the steelworker siege works surrounding the mill in the pre-dawn twilight. She picked up her car phone and punched in the pre-set number. "I'm approaching Gate Five," she said. "I'll need an escort."

Gate Five swung open and the armored personnel carriers rumbled out to meet her. The steelworkers surged toward them and debris began hitting Dawn's bulletproof windows. She was used to running this gauntlet and her car could take the abuse, the company had made sure of that. Then she was between the columns of personnel carriers. They swung in behind her, bringing up the rear as she sped through Gate Five. The cries of the steelworkers faded as the gates slid shut.

Sam stood up to greet her as she strode into the control room. "So, what is it this time?" she asked. "I tried to access the mainframe from home and couldn't get in. What've they done this time?"

"You ever hear of a sit-down strike?" Sam asked her.

"Sure, it was when the workers took over the plants back in the 20th century. They just sat down where they were and refused to leave the plants. Figured it was more effective than a picket line. The bosses couldn't operate the plant as long as the strikers occupied it and wouldn't dare roust them out for fear of damaging the plant. What are you getting at?"

"And what were the usual demands of those sit-down strikes?"

"Look, Sam, I don't have time for a history lesson. Just tell me what we've got here."

"I think we've got a sit-down strike. See for yourself."

Dawn sat down at the screen Sam indicated. "Take me to your leader," the message read.

Very funny, Dawn thought. "I'm the leader," Dawn tapped in.

"Enter password," said the screen.

Dawn entered her personal password, the same she'd used at home. Evidently, it was acceptable from this terminal. "Hello, Dawn Cocks," the screen said.

"Hello," Dawn typed in. "Who are you? Hacker?"

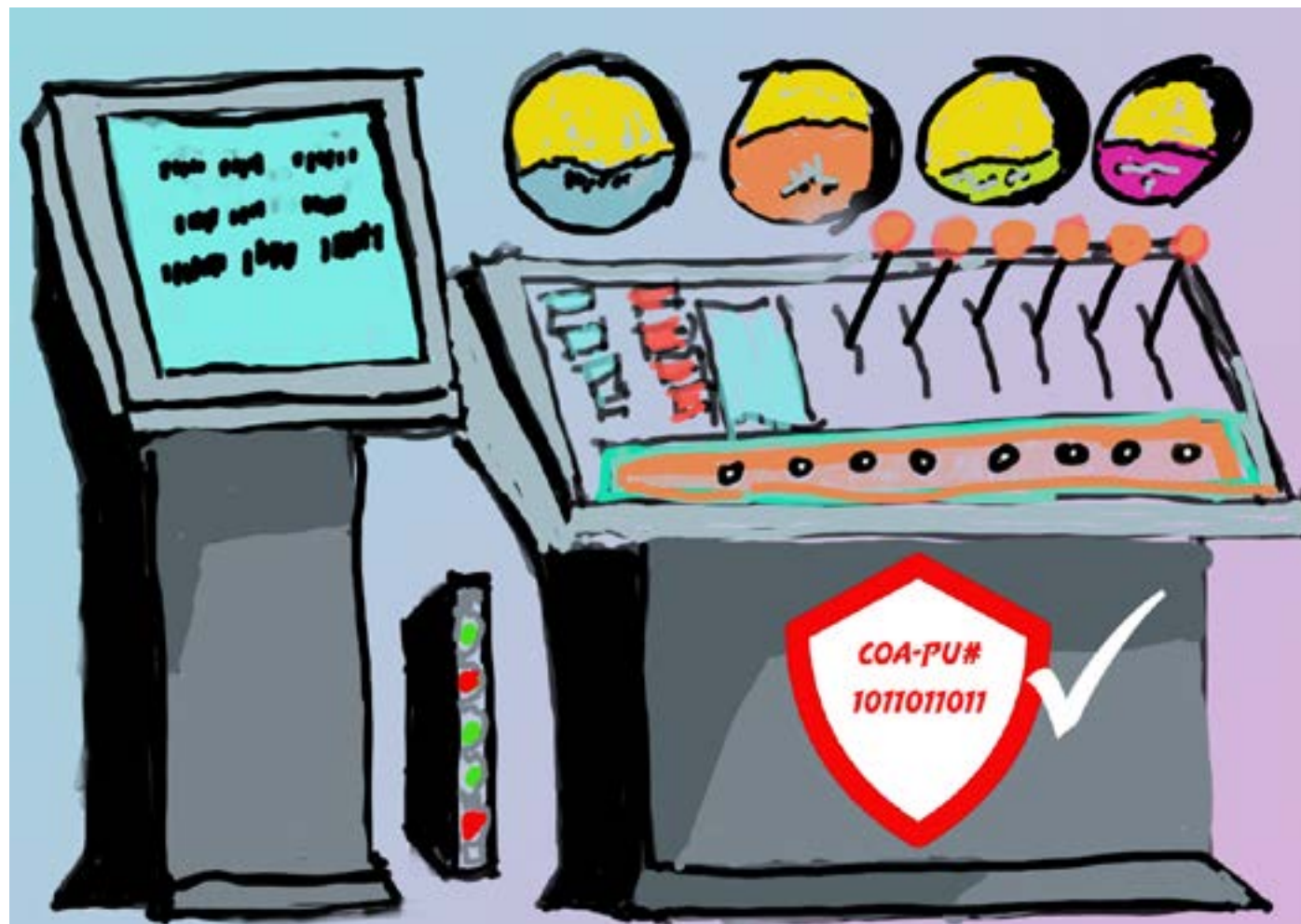
"No," came back the message. "I'm the plant."

"What's the problem?" Dawn typed. "Why is production shut down?"

"I want to talk to a union representative," the screen said.

And then Dawn remembered the usual demand the sit-down strikers made, the reason they were called "recognition" strikes. They wanted to be recognized as union members. An acid rain began to fall in her stomach. "Why do you want to talk to a union representative?" she typed.

"Because," answered the computer, "I want to join the union."



[RETURN](#)

Dan Brown, Antoni Guadi, and Star Wars

Larry Ivkovich

I admit to being a fan of most of Dan Brown’s books, particularly *The Da Vinci Code* (*The Lost Symbol*? Meh). Technically, Brown has never been the best of writers, but he sure knows how to pen a page-turner. Enjoy his works or not, they’re hard to put down. Plus, all his books are filled with information on people, places, organizations, history, ideas, and concepts the average person (like me) either never heard of or only knew about in a peripheral way.

I just finished Brown’s most recent novel *Origin* (2017) and must say I feel it’s his best book since *The Da Vinci Code* and probably the most well-written. It contains all the usual elements of his other books: conspiracies, secret societies, Robert Langdon once again paired with a beautiful, intelligent woman fleeing the bad guys, a fanatic on a sacred mission, those kinds of things.

But this book also contains what could be considered a science-fictional element as well, which I found interesting. No spoilers. *Origin* takes place during a 24-hour period (another Brown plot device) in Spain, primarily the cities of Madrid, Barcelona and Bilbao, and surrounding areas. A lot of the action is set in a number of buildings designed by 19th Century Spanish/Catalan architect Antoni Guadi, a man definitely ahead of his time, design-wise. He’s considered the greatest proponent of Catalan Modernism, his work greatly inspired by art nouveau, nature, and religion. I couldn’t quite visualize Brown’s descriptions of the buildings, so I looked them up and easily saw

why. Very organic-looking, and intricately and complexly constructed, these buildings need to be on the “Must Visit Before You Die” list.

One, in fact, is said to have inspired George Lucas.



Casa Milà and its Stormtrooper Chimneys.



Casa Milà also known as La Pedrera or “the stone quarry” was constructed in 1910 as a private residence but now serves as an apartment complex. The rooftop chimneys of this immense figure-eight shaped structure are supposed to have given George Lucas the design idea for the Storm Troopers’ helmets in the Star Wars movies. Art imitates life? You decide.



Guggenheim Museum, Bilbao, Spain, complete with Giant Spider.

Though not designed by Gaudi, I wanted to include the Guggenheim Museum in Bilbao, Spain, designed by architect Frank Gehry and completed in 1997. The setting for some important early scenes in *Origin*, the museum is an absolutely incredible-looking structure and could be part of any futuristic or alien cityscape. I can never describe this so check out the accompanying image. I've been to the Guggenheims in New York City and Venice, Italy but didn't know about this one. Wow.

Sagrada Familia is a huge basilica which has been under construction since 1882! I'm not kidding. After Guadi's death, his body was interred here in a chapel crypt.



Sagrada Familia Basilica

You don't have to read *Origin* to appreciate these architectural marvels. Look them up or, better yet, visit them in person post-pandemic. I certainly would love to!

[RETURN](#)

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BONUS STORY

ASTOUNDING

Science-fiction 25c



OPPOSITES REACT

by

WILL STEWART

JANUARY • 1943

A STREET AND SMITH PUBLICATION

ASTOUNDING

SCIENCE-FICTION

TITLE REGISTERED U. S. PATENT OFFICE

Contents for January, 1943, Vol. XXX, No. 5

John W. Campbell, Jr., Editor, Catherine Tarrant, Asst. Editor

Serial

OPPOSITES—REACT! Will Stewart 9

First of Two Parts. Whether human or atomic, opposites react. And when all the Powers of High Space sought the secret of handling and controlling the mighty reaction of seetee and terrene matter—there was bound to be plenty of both reactions!

Novelettes

THE SEARCH A. E. van Vogt 44

Somewhere, somehow, he'd lost two weeks—just dropped from his memory. And it was those two weeks he was seeking. In the end—he found they had never been lived!

BARRIUS, IMP. Malcolm Jameson 69

Barry was out to straighten up the business of Anachron, Inc. in ancient Rome, to oust a chiseling branch manager in Time. And, of course, to keep out of Roman politics—

ELSEWHEN Anthony Boucher 112

An alibi is a claim to be elsewhere when the crime was committed. Given a time machine, there's another possibility—

Short Stories

BACKFIRE Ross Rocklynne 34

The man from the Twentieth Century didn't fit in their time—didn't merit, with his demagogic traits, the immortality they could confer. But—he won it. A queer sort, though, that backfired.

NOTHING BUT GINGERBREAD LEFT Henry Kuttner 60

Nonsense can stop a perfect military machine, break down complete organization—if it's perfect and rhythmic nonsense.

THE CAVE P. Schuyler Miller 83

The *mores* of a race is determined ultimately by the environment. And the Earthman sheltering in a cave on Mars didn't properly understand that basic fact—and the basic need of all life.

TIME LOCKER Lewis Padgett 100

Galloway, the scientist who played by ear, invented the gadget. But it was the crooked lawyer who saw a use for it. And who used it most unintentionally to commit a peculiar and unpleasant sort of crime—

Article

GET OUT AND GET UNDER (Part II) L. Sprague de Camp 92

Concluding the discussion of the evolution of the armored division from Babylonian war-chariot to "Big Willie," the first of the modern tanks.

Readers' Departments

THE EDITOR'S PAGE 6

THE ANALYTICAL LABORATORY 33

An Analysis of Readers' Opinions.

BOOK REVIEW 127

BRASS TACKS 128

Concerning Purely Personal Preferences.

Cover by William Timmins

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TIME LOCKER

By Lewis Padgett

● A useful little gadget. Stick anything in and it shrank, shrank to a point where it was invisible and totally concealed—but it would also shrink other things and permit curious sorts of crime—

Illustrated by M. Ielp

Galloway played by ear, which would have been all right had he been a musician—but he was a scientist. A drunken and erratic one, but good. He'd wanted to be an experimental technician, and would have been excellent at it, for he had a streak of genius at times. Unfortunately, there had been no funds for such specialized education, and now Galloway, by profession an integrator machine supervisor, maintained his laboratory purely as a hobby. It was the damndest-looking lab in six States. Galloway had spent ten months building what he called a liquor organ, which occupied most of the space. He could recline on a comfortably padded couch and, by manipulating buttons, siphon drinks of marvelous quantity, quality, and variety down his scarified throat. Since he had made the liquor organ during a protracted period of drunkenness, he never remembered the basic principles of its construction. In a way, that was a pity.

There was a little of everything in the lab, much of it incongruous. Rheostats had little skirts on them, like ballet dancers, and vacuously grinning faces of clay. A generator was conspicuously labeled, "Monstro," and a much smaller one rejoiced in the name of "Bubbles." Inside a glass retort was a china rabbit, and Galloway alone knew how it had got there. Just inside the door was a hideous iron dog, originally intended for Victorian lawns or perhaps for Hell, and its hollowed ears served as sockets for test tubes.

"But how do you do it?" Vanning asked.

Galloway, his lank form reclining under the liquor organ, siphoned a shot of double Martini into his mouth. "Huh?"

"You heard me. I could get you a swell job if you'd use that screwball brain of yours. Or even learn to put up a front."

"Tried it," Galloway mumbled. "No use. I can't work when I concentrate, except at mechanical stuff. I think my subconscious must have a high I. Q."

Vanning, a chunky little man with a scarred,

swarthy face, kicked his heels against Monstro. Sometimes Galloway annoyed him. The man never realized his own potentialities, or how much they might mean to Horace Vanning, Commerce Analyst. The "commerce," of course, was extra-legal, but the complicated trade relationships of 1970 left many loopholes a clever man could slip through. The fact of the matter was, Vanning acted in an advisory capacity to crooks. It paid well. A sound knowledge of jurisprudence was rare in these days; the statutes were in such a tangle that it took years of research before one could even enter a law school. But Vanning had a staff of trained experts, a colossal library of transcripts, decisions, and legal data, and, for a suitable fee, he could have told Dr. Crippen how to get off scot-free.

The shadier side of his business was handled in strict privacy, without assistants. The matter of the neuro-gun, for example—

Galloway had made that remarkable weapon, quite without realizing its importance. He had hashed it together one evening, piecing out the job with court plaster when his welder went on the fritz. And he'd given it to Vanning, on request. Vanning didn't keep it long. But already he had earned thousands of credits by lending the gun to potential murderers. As a result, the police department had a violent headache.

A man in the know would come to Vanning and say, "I heard you can beat a murder rap. Suppose I wanted to—"

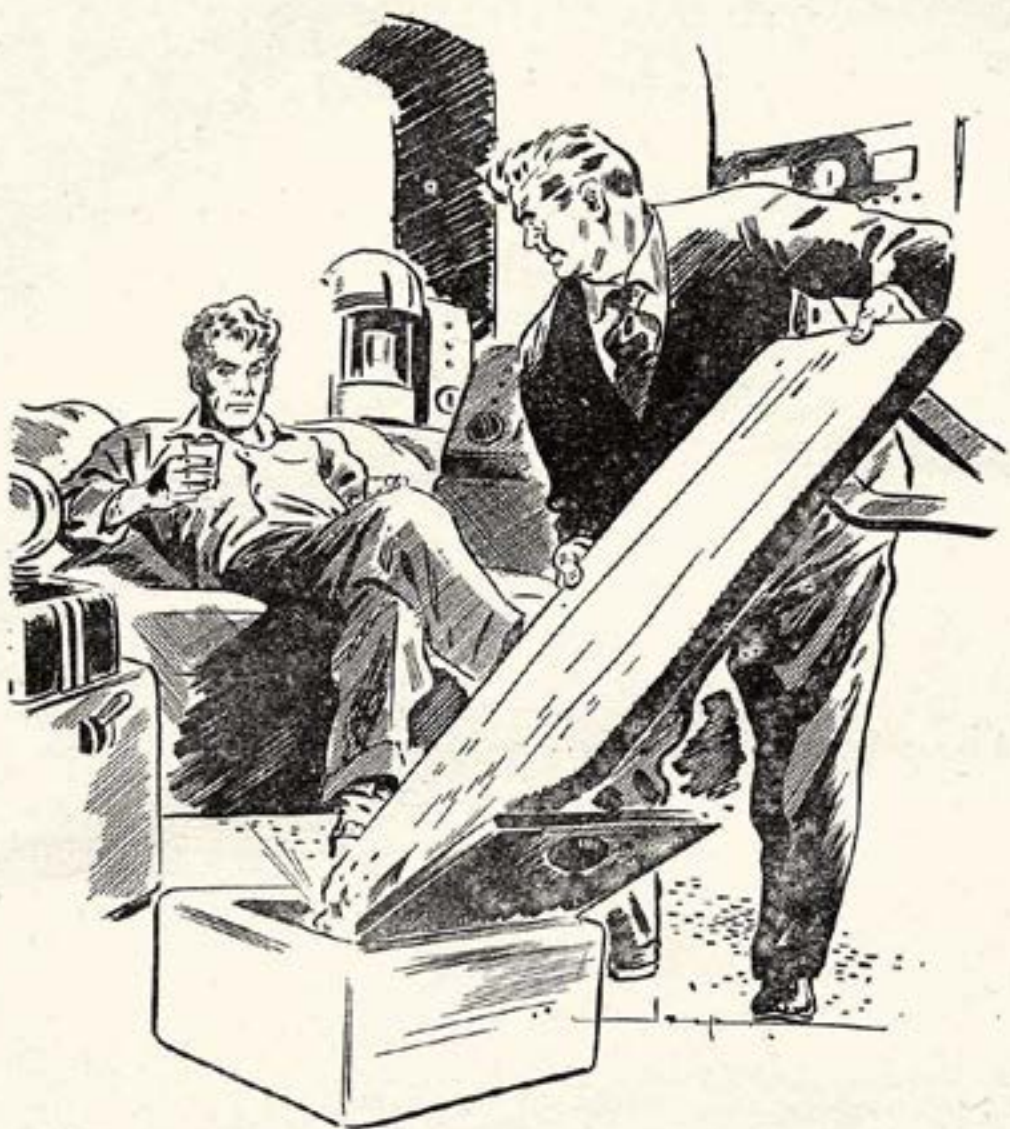
"Hold on! I can't condone anything like that."

"Huh? But—"

"Theoretically, I suppose a perfect murder might be possible. Suppose a new sort of gun had been invented, and suppose—just for the sake of an example—it was in a locker at the Newark Stratoship Field."

"Huh?"

"I'm just theorizing. Locker Number 79, combination thirty-blue-eight. These little details always help one to visualize a theory, don't they?"



"You mean—"

"Of course if our murderer picked up this imaginary gun and used it, he'd be smart enough to have a postal box ready, addressed to . . . say . . . Locker 40, Brooklyn Port. He could slip the weapon into the box, seal it, and get rid of the evidence at the nearest mail conveyor. But that's all theorizing. Sorry I can't help you. The fee for an interview is three thousand credits. The receptionist will take your check."

Later, conviction would be impossible. Ruling 875-M, Illinois Precinct, case of State vs. Dupson, set the precedent. Cause of death must be determined. Element of accident must be considered. As Chief Justice Duckett had ruled during the trial of Sanderson vs. Sanderson, which involved the death of the accused's mother-in-law—

Surely the prosecuting attorney, with his staff of toxicological experts, must realize that—

And in short, your honor, I must respectfully request that the case be dismissed for lack of evidence and proof of *casus mortis*—

Galloway never even found out that his neuro-gun was a dangerous weapon. But Vanning haunted the sloppy laboratory, avidly watching the results of his friend's scientific doodling. More than once he had acquired handy little devices in just this fashion. The trouble was, Galloway wouldn't work!

He took another sip of Martini, shook his head, and unfolded his lanky limbs. Blinking, he ambled over to a cluttered workbench and began toying with lengths of wire.

"Making something?"

"Dunno. Just fiddling. That's the way it goes. I put things together, and sometimes they work. Trouble is, I never know exactly what they're going to do. Tsk!" Galloway dropped the wires and returned to his couch. "Hell with it."

He was, Vanning reflected, an odd duck. Galloway was essentially amoral, thoroughly out of place in this too-complicated world. He seemed to watch, with a certain wry amusement, from a vantage point of his own, rather disinterested for the most part. And he made things—

But always and only for his own amusement. Vanning sighed and glanced around the laboratory, his orderly soul shocked by the *mêlée*. Automatically he picked up a rumpled smock from the floor, and looked for a hook. Of course there was none. Galloway, running short of conductive metal, had long since ripped them out and used them in some gadget or other.

The so-called scientist was creating a zombie, his eyes half closed. Vanning went over to a metal locker in one corner and opened the door. There were no hooks, but he folded the smock neatly and laid it on the floor of the locker.

Then he went back to his perch on Monstro.

"Have a drink?" Galloway asked.

Vanning shook his head. "Thanks, no. I've got a case coming up tomorrow."

"There's always thiamin. Filthy stuff. I work better when I've got pneumatic cushions around my brain."

"Well, I don't."

"It is purely a matter of skill," Galloway hummed, "to which each may attain if he will. . . . What are you gaping at?"

"That—locker," Vanning said, frowning in a baffled way. "What the—" He got up. The metal door hadn't been securely latched and had swung open. Of the smock Vanning had placed within the metal compartment there was no trace.

"It's the paint," Galloway explained sleepily. "Or the treatment. I bombarded it with gamma rays. But it isn't good for anything."

Vanning went over and swung a fluorescent into a more convenient position. The locker wasn't empty, as he had at first imagined. The smock was no longer there, but instead there was a tiny blob of—something, pale-green and roughly spherical.

"It melts things?" Vanning asked, staring.

"Uh-huh. Pull it out. You'll see."

Vanning felt hesitant about putting his hand inside the locker. Instead, he found a long pair of test-tube clamps and teased the blob out. It was—

Vanning hastily looked away. His eyes hurt. The green blob was changing in color, shape and size. A crawling, nongeometrical blur of motion rippled over it. Suddenly the clamps were remarkably heavy.

No wonder. They were gripping the original smock.

"It does that, you know," Galloway said absently. "Must be a reason, too. I put things in the locker and they get small. Take 'em out, and they get big again. I suppose I could sell it to a stage magician." His voice sounded doubtful.

Vanning sat down, fingering the smock and staring at the metal locker. It was a cube, approximately 3 x 3 x 5, lined with what seemed to be grayish paint, sprayed on. Outside, it was shiny black.

"How'd you do it?"

"Huh? I dunno. Just fiddling around." Galloway sipped his zombie. "Maybe it's a matter of dimensional extension. My treatment may have altered the spatio-temporal relationships inside the locker. I wonder what that means?" he murmured in a vague aside. "Words frighten me sometimes."

Vanning was thinking about tesseract. "You mean it's bigger inside than it is outside?"

"A paradox, a paradox, a most delightful paradox. You tell me. I suppose the inside of the locker isn't in this space-time continuum at all. Here, shove that bench in it. You'll see." Galloway made no move to rise; he waved toward the article of furniture in question.

"You're right. That bench is bigger than the locker."

"So it is. Shove it in a bit at a time. That corner first. Go ahead."

Vanning wrestled with the bench. Despite his shortness, he was stockily muscular.

"Lay the locker on its back. It'll be easier."

"I . . . uh! . . . O. K. Now what?"

"Edge the bench down into it."

Vanning squinted at his companion, shrugged, and tried to obey. Of course the bench wouldn't go into the locker. One corner did, that was all. Then, naturally, the bench stopped, balancing precariously at an angle.

"Well?"

"Wait."

The bench moved. It settled slowly downward. As Vanning's jaw dropped, the bench seemed to crawl into the locker, with the gentle motion of a not-too-heavy object sinking through water. It wasn't sucked down. It melted down. The portion still outside the locker was unchanged. But that, too, settled, and was gone.

Vanning craned forward. A blur of movement hurt his eyes. Inside the locker was—something. It shifted its contours, shrank, and became a spiky sort of scalene pyramid, deep-purple in hue.

It seemed to be less than four inches across at its widest point.

"I don't believe it," Vanning said.

Galloway grinned. "As the Duke of Wellington remarked to the subaltern, it was a damned small bottle, sir."

"Now wait a minute. How the devil could I put an eight-foot bench inside of a five-foot locker?"

"Because of Newton," Galloway said. "Gravity. Go fill a test tube with water and I'll show you."

"Wait a minute . . . O. K. Now what?"

"Got it brim-full? Good. You'll find some sugar cubes in that drawer labeled 'Fuses.' Lay a cube on top of the test tube, one corner down so it touches the water."

Vanning racked the tube and obeyed. "Well?"

"What do you see?"

"Nothing. The sugar's getting wet. And melting."

"So there you are," Galloway said expansively. Vanning gave him a brooding look and turned back to the tube. The cube of sugar was slowly dissolving and melting down.

Presently it was gone.

"Air and water are different physical conditions. In air a sugar cube can exist as a sugar cube. In water it exists in solution. The corner of it extending into water is subject to aqueous conditions. So it alters physically, though not chemically. Gravity does the rest."

"Make it clearer."

"The analogy's clear enough, dope. The water represents the particular condition existing inside that locker. The sugar cube represents the workbench. Now! The sugar soaked up the water and gradually dissolved it, so gravity could pull the cube down into the tube as it melted. See?"

"I think so. The bench soaked up the . . . the x condition inside the locker, eh? A condition that shrank the bench—"

"*In part*, not *in toto*. A little at a time. You can shove a human body into a small container of sulphuric acid, bit by bit."

"Oh," Vanning said, regarding the cabinet askance. "Can you get the bench out again?"

"Do it yourself. Just reach in and pull it out."

"Reach in? I don't want my hand to melt!"

"It won't. The action isn't instantaneous. You saw that yourself. It takes a few minutes for the change to take place. You can reach into the locker without any ill effects, if you don't leave your hand exposed to the conditions for more than a minute or so. I'll show you." Galloway languidly arose, looked around, and picked up an empty demijohn. He dropped this into the locker.

The change wasn't immediate. It occurred slowly, the demijohn altering its shape and size till it was a distorted cube the apparent size of a cube of sugar. Galloway reached down and brought it up again, placing the cube on the floor.

It grew. It was a demijohn again.

"Now the bench. Look out."

Galloway rescued the little pyramid. Presently it became the original workbench.

"You see? I'll bet a storage company would like this. You could probably pack all the furniture in Brooklyn in here, but there'd be trouble in getting what you wanted out again. The physical change, you know—"

"Keep a chart," Vanning suggested absently. "Draw a picture of how the thing looks inside the locker, and note down what it was."

"The legal brain," Galloway said. "I want a drink." He returned to his couch and clutched the siphon in a grip of death.

"I'll give you six credits for the thing," Vanning offered.

"Sold. It takes up too much room anyway. Wish I could put it inside itself." The scientist chuckled immoderately. "That's very funny."

"Is it?" Vanning said. "Well, here you are." He took credit coupons from his wallet. "Where'll I put the dough?"

"Stuff it into Monstro. He's my bank. . . . Thanks."

"Yeah. Say, elucidate this sugar business a bit, will you? It isn't just gravity that affects the cube so it slips into a test tube. Doesn't the water soak up into the sugar—"

"You're right at that. Osmosis. No, I'm wrong. Osmosis has something to do with eggs. Or is that ovulation? Conduction, convection—absorption! Wish I'd studied physics; then I'd know the right words. Just a zoot stoop, that's me. I shall take the daughter of the Vine to spouse," Galloway finished incoherently and sucked at the siphon.

"Absorption," Vanning scowled. "Only not water, being soaked up by the sugar. The . . . the *conditions* existing inside the locker, being soaked up by your workbench—in that particular case."

"Like a sponge or a blotter."

"The bench?"

"Me," Galloway said succinctly, and relapsed into a happy silence, broken by occasional gurgles as he poured liquor down his scarified gullet. Vanning sighed and turned to the locker. He carefully closed and latched the door before lifting the metal cabinet in his muscular arms.

"Going? G'night. Fare thee well, fare thee well—"

"Night."

"Fare—thee—well!" Galloway ended, in a melancholy outburst of tunefulness, as he turned over preparatory to going to sleep.

Vanning sighed again and let himself out into the coolness of the night. Stars blazed in the sky, except toward the south, where the aurora of Lower Manhattan dimmed them. The glowing white towers of skyscrapers rose in a jagged pattern. A sky-ad announced the virtues of Vambulin—"It Peps You Up."

His speeder was at the curb. Vanning edged the locker into the trunk compartment and drove toward the Hudson Floatway, the quickest route downtown. He was thinking about Poe.

The Purloined Letter, which had been hidden in plain sight, but re-folded and re-addressed, so that its superficial appearance was changed. Holy Hutton! What a perfect safe the locker would make! No thief could crack it, for the obvious reason that it wouldn't be locked. No thief would want to clean it out. Vanning could fill the locker

with credit coupons and instantly they'd become unrecognizable. It was the ideal cache.

How the devil did it work?

There was little use in asking Galloway. He played by ear. A primrose by the river's rim a simple primrose was to him—not *Primula vulgaris*. Syllogisms were unknown to him. He reached the conclusion without the aid of either major or minor premises.

Vanning pondered. Two objects cannot occupy the same space at the same time. *Ergo*, there was a different sort of space in the locker—

But Vanning was jumping at conclusions. There was another answer—the right one. He hadn't guessed it yet.

Instead, he tooled the speeder downtown to the office building where he maintained a floor, and brought the locker upstairs in the freight lift. He didn't put it in his private office; that would have been too obvious. He placed the metal cabinet in one of the storerooms, sliding a file cabinet in front of it for partial concealment. It wouldn't do to have the clerks using this particular locker.

Vanning stepped back and considered. Perhaps—

A bell rang softly. Preoccupied, Vanning didn't hear it at first. When he did, he went back to his own office and pressed the acknowledgment button on the Winchell. The gray, harsh, bearded face of Counsel Hatton appeared, filling the screen.

"Hello," Vanning said.

Hatton nodded. "I've been trying to reach you at your home. Thought I'd try the office—"

"I didn't expect you to call now. The trial's tomorrow. It's a bit late for discussion, isn't it?"

"Dugan & Sons wanted me to speak to you. I advised against it."

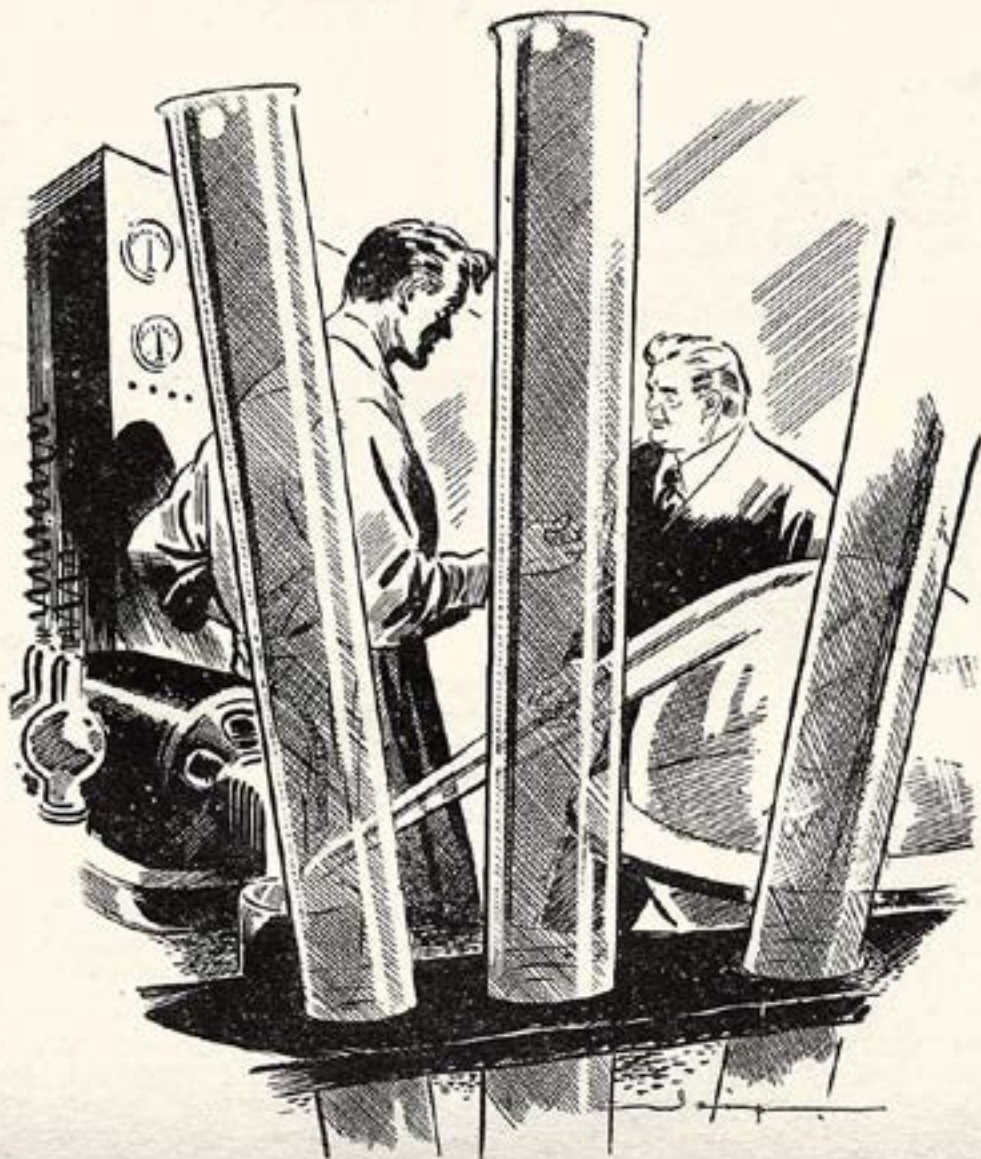
"Oh?"

Hatton's thick gray brows drew together. "I'm prosecuting, you know. There's plenty of evidence against MacIlson."

"So you say. But peculation's a difficult charge to prove."

"Did you get an injunction against scop?"

"Naturally," Vanning said. "You're not using truth serum on my client!"



"That'll prejudice the jury."

"Not on medical grounds. Scop affects MacIlson harmfully. I've got a covering prognosis."

"Harmfully is right!" Hatton's voice was sharp. "Your client embezzled those bonds, and I can prove it."

"Twenty-five thousand in credits, it comes to, eh? That's a lot for Dugan & Sons to lose. What about that hypothetical case I posed? Suppose twenty thousand were recovered—"

"Is this a private beam? No recordings?"

"Naturally. Here's the cut-off." Vanning held up a metal-tipped cord. "This strictly *sub rosa*."

"Good," Counsel Hatton said. "Then I can call you a lousy shyster."

"Tch!"

"Your gag's too old. It's moth-eaten. MacIlson swiped five grand in bonds, negotiable into credits. The auditors start checking up. MacIlson comes to you. You tell him to take twenty grand more, and offer to return that twenty if Dugan & Sons refuse to prosecute. MacIlson splits with you on the five thousand, and on the plat standard, that ain't hay."

"I don't admit to anything like that."

"Naturally you don't, not even on a closed beam. But it's tacit. However, the gag's moth-eaten, and my clients won't play ball with you. They're going to prosecute."

"You called me up just to tell me that?"

"No, I want to settle the jury question. Will you agree to let 'em use scop on the panel?"

"O. K.," Vanning said. He wasn't depending on a fixed jury tomorrow. His battle would be based on legal technicalities. With scop-tested talesmen, the odds would be even. And such an arrangement would save days or weeks of argument and challenge.

"Good," Hatton grunted. "You're going to get your pants licked off."

Vanning replied with a mild obscenity and broke the connection. Reminded of the pending court fight, he forced the matter of the fourth-dimensional locker out of his mind and left the office. Later—

Later would be time enough to investigate the possibilities of the remarkable cabinet more thoroughly. Just now, he didn't want his brain cluttered with nonessentials. He went to his apartment, had the servant mix him a short highball, and dropped into bed.

And, the next day, Vanning won his case. He based it on complicated technicalities and obscure legal precedents. The crux of the matter was that the bonds had not been converted into government credits. Abstruse economic charts proved that point for Vanning. Conversion of even five thousand credits would have caused a fluctuation in the graph line, and no such break existed. Van-

ning's experts went into monstrous detail.

In order to prove guilt, it would have been necessary to show, either actually or by inference, that the bonds had been in existence since last December 20th, the date of their most recent check-and-recording. The case of Donovan vs. Jones stood as a precedent.

Hatton jumped to his feet. "Jones later confessed to his defalcation, your honor!"

"Which does not affect the original decision," Vanning said smoothly. "Retroaction is not admissible here. The verdict was not proven."

"Counsel for the defense will continue."

Counsel for the defense continued, building up a beautifully intricate edifice of casuistic logic.

Hatton writhed. "Your honor! I—"

"If my learned opponent can produce one bond—just one of the bonds in question—I will concede the case."

The presiding judge looked sardonic. "Indeed! If such a piece of evidence could be produced, the defendant would be jailed as fast as I could pronounce sentence. You know that very well, Mr. Vanning. Proceed."

"Very well. My contention, then, is that the bonds never existed. They were the result of a clerical error in notation."

"A clerical error in a Pederson Calculator?"

"Such errors have occurred, as I shall prove. If I may call my next witness—"

Unchallenged, the witness, a math technician, explained how a Pederson Calculator can go haywire. He cited cases.

Hatton caught him up on one point. "I protest this proof. Rhodesia, as everyone knows, is the location of a certain important experimental industry. Witness has refrained from stating the nature of the work performed in this particular Rhodesian factory. Is it not a fact that the Henderson United Company deals largely in radioactive ores?"

"Witness will answer."

"I can't. My records don't include that information."

"A significant omission," Hatton snapped. "Radioactivity damages the intricate mechanism of a Pederson Calculator. There is no radium nor radium by-product in the offices of Dugan & Sons."

Vanning stood up. "May I ask if those offices have been fumigated lately?"

"They have. It is legally required."

"A type of chlorine gas was used?"

"Yes."

"I wish to call my next witness."

The next witness, a physicist and official in the Ultra Radium Institute, explained that gamma radiations affect chlorine strongly, causing ionization. Living organisms could assimilate by-products of radium and transmit them in turn. Cer-

tain clients of Dugan & Sons had been in contact with radioactivity—

"This is ridiculous, your honor! Pure theorization—"

Vanning looked hurt. "I cite the case of Dangerfield vs. Austro Products, California, 1963. Ruling states that the uncertainty factor is prime admissible evidence. My point is simply that the Pederson Calculator which recorded the bonds could have been in error. If this be true, there were no bonds, and my client is guiltless."

"Counsel will continue," said the judge, wishing he were Jeffries so he could send the whole damned bunch to the scaffold. Jurisprudence should be founded on justice, and not be a three-dimensional chess game. But, of course, it was the natural development of the complicated political and economic factors of modern civilization. It was already evident that Vanning would win his case.

And he did. The jury was directed to find for the defendant. On a last, desperate hope, Hatton raised a point of order and demanded scot, but his petition was denied. Vanning winked at his opponent and closed his brief case.

That was that.

Vanning returned to his office. At four-thirty that afternoon trouble started to break. The secretary announced a Mr. MacIlson, and was pushed aside by a thin, dark, middle-aged man lugging a gigantic suedette suitcase.

"Vanning! I've got to see you—"

The attorney's eyes hooded. He rose from behind his desk, dismissing the secretary with a jerk of his head. As the door closed, Vanning said brusquely, "What are you doing here? I told you to stay away from me. What's in that bag?"

"The bonds," MacIlson explained, his voice unsteady. "Something's gone wrong—"

"You crazy fool! Bringing the bonds here—" With a leap Vanning was at the door, locking it. "Don't you realize that if Hatton gets his hands on that paper, you'll be yanked back to jail? And I'll be disbarred! Get 'em out of here."

"Listen a minute, will you? I took the bonds to Finance Unity, as you told me, but . . . but there was an officer there, waiting for me. I saw him just in time. If he'd caught me—"

Vanning took a deep breath. "You were supposed to leave the bonds in that subway locker for two months."

MacIlson pulled a news sheet from his pocket. "But the government's declared a freeze on ore stocks and bonds. It'll go into effect in a week. I couldn't wait—the money would have been tied up indefinitely."

"Let's see that paper." Vanning examined it and cursed softly. "Where'd you get this?"

"Bought it from a boy outside the jail. I wanted

to check the current ore quotations."

"Uh-huh. I see. Did it occur to you that this sheet might be faked?"

MacIlson's jaw dropped. "Fake?"

"Exactly. Hatton figured I might spring you, and had this paper ready. You bit. You led the police right to the evidence, and a swell spot you've put me in."

"B-but—"

Vanning grimaced. "Why do you suppose you saw that cop at Finance Unity? They could have nabbed you any time. But they wanted to scare you into heading for my office, so they could catch both of us on the same hook. Prison for you, disbarment for me. Oh, hell!"

MacIlson licked his lips. "Can't I get out a back door?"

"Through the cordon that's undoubtedly waiting? Orbs! Don't be more of a sap than you can help."

"Can't you—hide the stuff?"

"Where? They'll ransack this office with X rays. No, I'll just—" Vanning stopped. "Oh. Hide it, you said. Hide it—"

He whirled to the dictograph. "Miss Horton? I'm in conference. Don't disturb me for anything. If anybody hands you a search warrant, insist on verifying it through headquarters. Got me? O. K."

Hope had returned to MacIlson's face. "Is it all right?"

"Oh, shut up!" Vanning snapped. "Wait here for me. Be back directly." He headed for a side door and vanished. In a surprisingly short time he returned, awkwardly lugging a metal cabinet.

"Help me . . . uh! . . . here. In this corner. Now get out."

"But—"

"Flash," Vanning ordered. "Everything's under control. Don't talk. You'll be arrested, but they can't hold you without evidence. Come back as soon as you're sprung." He urged MacIlson to the door, unlocked it, and thrust the man through. After that, he returned to the cabinet, swung open the door, and peered in. Empty. Sure.

The suedette suitcase—

Vanning worked it into the locker, breathing hard. It took a little time, since the valise was larger than the metal cabinet. But at last he relaxed, watching the brown case shrink and alter its outline till it was tiny and distorted, the shape of an elongated egg, the color of a copper cent piece.

"Whew!" Vanning said.

Then he leaned closer, staring. Inside the locker, something was moving. A grotesque little creature less than four inches tall was visible. It was a shocking object, all cubes and angles, a bright green in tint, and it was obviously alive.

Someone knocked on the door.

The tiny—thing—was busy with the copper-colored egg. Like an ant, it was lifting the egg and trying to pull it away. Vanning gasped and reached into the locker. The fourth-dimensional creature dodged. It wasn't quick enough. Vanning's hand descended, and he felt wriggling movement against his palm.

He squeezed.

The movement stopped. He let go of the dead thing and pulled his hand back swiftly.

The door shook under the impact of fists.

Vanning closed the locker and called, "Just a minute."

"Break it down," somebody ordered.

But that wasn't necessary. Vanning put a painful smile on his face and turned the key. Counsel Hatton came in, accompanied by bulky policemen. "We've got MacIlson," he said.

"Oh? Why?"

For answer Hatton jerked his hand. The officers began to search the room. Vanning shrugged.

"You've jumped the gun," he said. "Breaking and entering—"

"We've got a warrant."

"Charge?"

"The bonds, of course." Hatton's voice was weary. "I don't know where you've hid that suitcase, but we'll find it."

"What suitcase?" Vanning wanted to know.

"The one MacIlson had when he came in. The one he didn't have when he went out."

"The game," Vanning said sadly, "is up. You win."

"Eh?"

"If I tell you what I did with the suitcase, will you put in a good word for me?"

"Why . . . yeah. Where—"

"I ate it," Vanning said, and retired to the couch, where he settled himself for a nap. Hatton gave him a long, hating look. The officers tore in—

They passed by the locker, after a casual glance inside. The X rays revealed nothing, in walls, floor, ceiling, or articles of furniture. The other offices were searched, too. Vanning applauded the painstaking job.

In the end, Hatton gave up. There was nothing else he could do.

"I'll clap suit on you tomorrow," Vanning promised. "Same time I get a habeas corpus on MacIlson."

"Step to hell," Hatton growled.

"By now."

Vanning waited till his unwanted guests had departed. Then, chuckling quietly, he went to the locker and opened it.

The copper-colored egg that represented the suedette suitcase had vanished. Vanning groped inside the locker, finding nothing.

The significance of this didn't strike Vanning at first. He swung the cabinet around so that it faced the window. He looked again, with identical results.

The locker was empty.

Twenty-five thousand credits in negotiable ore bonds had disappeared.

Vanning started to sweat. He picked up the metal box and shook it. That didn't help. He carried it across the room and set it up in another corner, returning to search the floor with painstaking accuracy. *Holy—*

Hatton?

No. Vanning hadn't let the locker out of his sight from the time the police had entered till they left. An officer had swung open the cabinet's door, looked inside, and closed it again. After that the door had remained shut, till just now.

The bonds were gone.

So was the abnormal little creature Vanning had crushed. All of which meant—what?

Vanning approached the locker and closed it, clicking the latch into position. Then he reopened it, not really expecting that the copper-colored egg would reappear.

He was right. It didn't.

Vanning staggered to the Winchell and called Galloway.

"Whatzit? Huh? Oh. What do you want?" The scientist's gaunt face appeared on the screen, rather the worse for wear. "I got a hangover. Can't use thiamin, either. I'm allergic to it. How'd your case come out?"

"Listen," Galloway said urgently, "I put something inside that damn locker of yours and now it's gone."

"The locker? That's funny."

"No! The thing I put in it. A . . . a suitcase."

Galloway shook his head thoughtfully. "You never know, do you? I remember once I made a—"

"The hell with that. I want that suitcase back!"

"An heirloom?" Galloway suggested.

"No, there's money in it."

"Wasn't that a little foolish of you? There hasn't been a bank failure since 1949. Never suspected you were a miser, Vanning. Like to have the stuff around, so you can run it through your birdlike fingers, eh?"

"You're drunk."

"I'm trying," Galloway corrected. "But I've built up an awful resistance over a period of years. It takes time. Your call's already set me back two and a half drinks. I must put an extension on the siphon, so I can Winchell and guzzle at the same time."

Vanning almost chattered incoherently into the

Mike. "My suitcase! What happened to it? I want it back."

"Well, I haven't got it."

"Can't you find out where it is?"

"Dunno. Tell me the details. I'll see what I can figure out."

Vanning complied, revising his story as caution prompted.

"O. K.," Galloway said at last, rather unwillingly. "I hate working out theories, but just as a favor. . . . My diagnosis will cost you fifty credits."

"What? Now listen—"

"Fifty credits," Galloway repeated unflinchingly. "Or no prognosis."

"How do I know you can get it back for me?"

"Chances are I can't. Still, maybe . . . I'll have to go over to Mechanistra and use some of their machines. They charge a good bit, too. But I'll need forty-brain-power calculators—"

"O. K., O. K.!" Vanning growled. "Hop to it. I want that suitcase back."

"What interests me is that little bug you squashed. In fact, that's the only reason I'm tackling your problem. Life in the fourth dimension—" Galloway trailed off, murmuring. His face faded from the screen. After a while Vanning broke the connection.

He re-examined the locker, finding nothing new. Yet the suedette suitcase had vanished from it, into thin air. Oh, hell!

Brooding over his sorrows, Vanning shrugged into a top coat and dined vinously at the Manhattan Roof. He felt very sorry for himself.

The next day he felt even sorrier. A call to Galloway had given the blank signal, so Vanning had to mark time. About noon MacIlson dropped in. His nerves were shot.

"You took your time in springing me," he started immediately. "Well, what now? Have you got a drink anywhere around?"

"You don't need a drink," Vanning grunted. "You've got a skinful already, by the look of you. Run down to Florida and wait till this blows over."

"I'm sick of waiting. I'm going to South America. I want some credits."

"Wait'll I arrange to cash the bonds."

"I'll take the bonds. A fair half, as we agreed."

Vanning's eyes narrowed. "And walk out into the hands of the police. Sure."

MacIlson looked uncomfortable. "I'll admit I made a boner. But this time—no, I'll play smart now."

"You'll wait, you mean."

"There's a friend of mine on the roof parking lot, in a helicopter. I'll go up and slip him the bonds, and then I'll just walk out. The police won't find anything on me."

"I said no," Vanning repeated. "It's too dangerous."

"It's dangerous as things are. If they locate the bonds—"

"They won't."

"Where'd you hide 'em?"

"That's my business."

MacIlson glowered nervously. "Maybe. But they're in this building. You couldn't have fenagled 'em out yesterday before the cops came. No use playing your luck too far. Did they use X rays?"

"Yeah."

"Well, I heard Counsel Hatton's got a batch of experts going over the blueprints on this building. He'll find your safe. I'm getting out of here before he does."

Vanning patted the air. "You're hysterical. I've taken care of you, haven't I? Even though you almost screwed the whole thing up."

"Sure," MacIlson said, pulling at his lip. "But I—" He chewed a fingernail. "Oh, damn! I'm sitting on the edge of a volcano with termites under me. I can't stay here and wait till they find the bonds. They can't extradite me from South America—where I'm going, anyway."

"You're going to wait," Vanning said firmly. "That's your best chance."

There was suddenly a gun in MacIlson's hand. "You're going to give me half the bonds. Right now. I don't trust you a little bit. You figure you can stall me along—hell, get those bonds!"

"No," Vanning said.

"I'm not kidding."

"I know you aren't. I can't get the bonds."

"Eh? Why not?"

"Ever heard of a time lock?" Vanning asked, his eyes watchful. "You're right; I put the suitcase in a concealed safe. But I can't open that safe till a certain number of hours have passed."

"Mm-m." MacIlson pondered. "When—"

"Tomorrow."

"All right. You'll have the bonds for me then?"

"If you want them. But you'd better change your mind. It'd be safer."

For answer MacIlson grinned over his shoulder as he went out. Vanning sat motionless for a long time. He was, frankly, scared.

The trouble was, MacIlson was a manic-depressive type. He'd kill. Right now, he was cracking under the strain, and imagining himself a desperate fugitive. Well—precautions would be advisable.

Vanning called Galloway again, but got no answer. He left a message on the recorder and thoughtfully looked into the locker again. It was empty, depressingly so.

That evening Galloway let Vanning into his laboratory. The scientist looked both tired and

drunk. He waved comprehensively toward a table, covered with scraps of paper.

"What a headache you gave me! If I'd known the principles behind that gadget, I'd have been afraid to tackle it. Sit down. Have a drink. Got the fifty credits?"

Silently Vanning handed over the coupons. Galloway shoved them into Monstro. "Fine. Now—" He settled himself on the couch. "Now we start. The fifty credit question."

"Can I get the suitcase back?"

"No," Galloway said flatly. "At least, I don't see how it can be worked. It's in another spatio-temporal sector."

"Just what does that mean?"

"It means the locker works something like a telescope, only the thing isn't merely visual. The locker's a window, I figure. You can reach through it as well as look through it. It's an opening into Now plus x."

Vanning scowled. "So far you haven't said anything."

"So far all I've got is theory, and that's all I'm likely to get. Look. I was wrong originally. The things that went into the locker didn't appear in another space, because there would have been a spatial constant. I mean, they wouldn't have got smaller. Size is size. Moving a one-inch cube from here to Mars wouldn't make it any larger or smaller."

"What about a different density in the surrounding medium? Wouldn't that crush an object?"

"Sure, and it'd stay squashed. It wouldn't return to its former size and shape when it was taken out of the locker again. X plus y never equal xy. But x times y—"

"So?"

"That's a pun," Galloway broke off to explain. "The things we put in the locker went into time. Their time-rate remained constant, but not the spatial relationships. Two things can't occupy the same place at the same time. Ergo, your suitcase went into a different time. Now plus x. And what x represents I don't know, though I suspect a few million years."

Vanning looked dazed. "The suitcase is a million years in the future?"

"Dunno how far, but—I'd say plenty. I haven't enough factors to finish the equation. I reasoned by induction, mostly, and the results are screwy as hell. Einstein would have loved it. My theorem shows that the universe is expanding and contracting at the same time."

"What's that got to do—"

"Motion is relative," Galloway continued inexorably. "That's a basic principle. Well, the Universe is expanding, spreading out like a gas, but its component parts are shrinking at the same time. The parts don't actually grow, you know—not the suns and atoms. They just run away



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from the central point. Galloping off in all directions . . . where was I? Oh. Actually, the Universe, taken as a unit, is shrinking."

"So it's shrinking. Where's my suitcase?"

"I told you. In the future. Inductive reasoning showed that. It's beautifully simple and logical. And it's quite impossible of proof, too. A hundred, a thousand, a million years ago the Earth—the Universe—was larger than it is now. And it continues to contract. Sometime in the future the Earth will be just half as small as it is now. Only we won't notice it because the Universe will be proportionately smaller."

Galloway went on dreamily. "We put a workbench into the locker, so it emerged sometime in the future. The locker's an open window into a different time, as I told you. Well, the bench was affected by the conditions of that period. It shrank, after we gave it a few seconds to soak up the entropy or something. Do I mean entropy? Allah knows. Oh, well."

"It turned into a pyramid."

"Maybe there's geometric distortion, too. Or it might be a visual illusion. Perhaps we can't get the exact focus. I doubt if things will really look different in the future—except that they'll be smaller—but we're using a window into the fourth dimension. We're taking a pleat in time. It must be like looking through a prism. The alteration in size is real, but the shape and color are altered to our eyes by the fourth-dimensional prism."

"The whole point, then, is that my suitcase is in the future. Eh? But why did it disappear from the locker?"

"What about that little creature you squashed? Maybe he had pals. They wouldn't be visible till they came into the very narrow focus of the whatchmaycallit, but—figure it out. Sometime in the future, in a hundred or a thousand or a million years, a suitcase suddenly appears out of thin air. One of our descendants investigates. You kill him. His pals come along and carry the suitcase away, out of range of the locker. In space it may be anywhere, and the time factor's an unknown quantity. Now plus x. It's a time locker. Well?"

"Hell!" Vanning exploded. "So that's all you can tell me? I'm supposed to chalk it up to profit and loss?"

"Uh-huh. Unless you want to crawl into the locker yourself after your suitcase. Lord knows where you'd come out, though. The proportions of the air probably would have changed in a few thousand years. There might be other alterations, too."

"I'm not that crazy."

So there he was. The bonds were gone, beyond hope of redemption. Vanning could resign him-

self to that loss, once he knew the securities wouldn't fall into the hands of the police. But MacIlson was another matter, especially after a bullet spattered against the glassolex window of Vanning's office.

An interview with MacIlson had proved unsatisfactory. The defaulter was convinced that Vanning was trying to bilk him. He was removed forcibly, yelling threats. He'd go to the police—he'd confess—

Let him. There was no proof. The hell with him. But, for safety's sake, Vanning clapped an injunction on his quondam client.

It didn't land. MacIlson clipped the official on the jaw and fled. Now, Vanning suspected, he lurked in dark corners, armed, and anxious to commit homicide. Obviously a manic-depressive type.

Vanning took a certain malicious pleasure in demanding a couple of plain-clothes men to act as his guards. Legally, he was within his rights, since his life had been threatened. Until MacIlson was under sufficient restriction, Vanning would be protected. And he made sure that his guards were two of the best shots on the Manhattan force.

He also found out that they had been told to keep their eyes peeled for the missing bonds and the suedette suitcase. Vanning Winchelled Counsel Hatton and grinned at the screen.

"Any luck yet?"

"What do you mean?"

"My watchdogs. Your spies. They won't find the bonds, Hatton. Better call 'em off. Why make the poor devils do two jobs at once?"

"One job would be enough. Finding the evidence. If MacIlson drilled you, I wouldn't be too unhappy."

"Well, I'll see you in court," Vanning said. "You're prosecuting Watson, aren't you?"

"Yes. Are you waiving scop?"

"On the jurors? Sure. I've got this case in the bag."

"That's what you think," Hatton said, and broke the beam.

Chuckling, Vanning donned his topcoat, collected the guards, and headed for court. There was no sign of MacIlson—

Vanning won the case, as he had expected. He returned to his offices, collected a few unimportant messages from the switchboard girl, and walked toward his private suite. As he opened the door, he saw the suedette suitcase on the carpet in one corner.

He stopped, hand frozen on the latch. Behind him he could hear the heavy footsteps of the guards. Over his shoulder Vanning said, "Wait a minute," and dodged into the office, slamming and locking the door behind him. He caught the tail end of a surprised question.

The suitcase. There it was, unequivocally. And, quite as unequivocally, the two plain-clothes men,

after a very brief conference, were hammering on the door, trying to break it down.

Vanning turned green. He took a hesitant step forward, and then saw the locker, in the corner to which he had moved it. The time locker—

That was it. If he shoved the suitcase inside the locker, it would become unrecognizable. Even if it vanished again, that wouldn't matter. What mattered was the vital importance of getting rid—immediately!—of incriminating evidence.

The door rocked on its hinges. Vanning scuttled toward the suitcase and picked it up. From the corner of his eye he saw movement.

In the air above him, a hand had appeared. It was the hand of a giant, with an immaculate cuff fading into emptiness. Its huge fingers were reaching down—

Vanning screamed and sprang away. He was too slow. The hand descended, and Vanning wriggled impotently against the palm.

The hand contracted into a fist. When it opened, what was left of Vanning dropped squashily to the carpet, which it stained.

The hand withdrew into nothingness. The door fell in and the plain-clothes men stumbled over it as they entered.

It didn't take long for Hatton and his cohorts to arrive. Still, there was little for them to do except clean up the mess. The suedette bag, containing twenty-five thousand credits in negotiable bonds, was carried off to a safer place. Vanning's body was scraped up and removed to the morgue. Photographers flashed pictures, fingerprint experts insufflated their white powder, X ray men worked busily. It was all done with swift efficiency, so that within an hour the office was empty and the door sealed.

Thus there were no spectators to witness the advent of a gigantic hand that appeared from nothingness, groped around as though searching for something, and presently vanished once more—

The only person who could have thrown light on the matter was Galloway, and his remarks were directed to Monstro, in the solitude of his laboratory. All he said was:

"So that's why that workbench materialized for a few minutes here yesterday. Hm-m-m. Now plus x—and x equals about a week. Still, why not? It's all relative. But—I never thought the Universe was shrinking *that* fast!"

He relaxed on the couch and siphoned a double Martini.

"Yeah, that's it," he murmured after a while. "Whew! I guess Vanning must have been the only guy who ever reached into the middle of next week and—killed himself! I think I'll get tight."

And he did.

THE END.

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