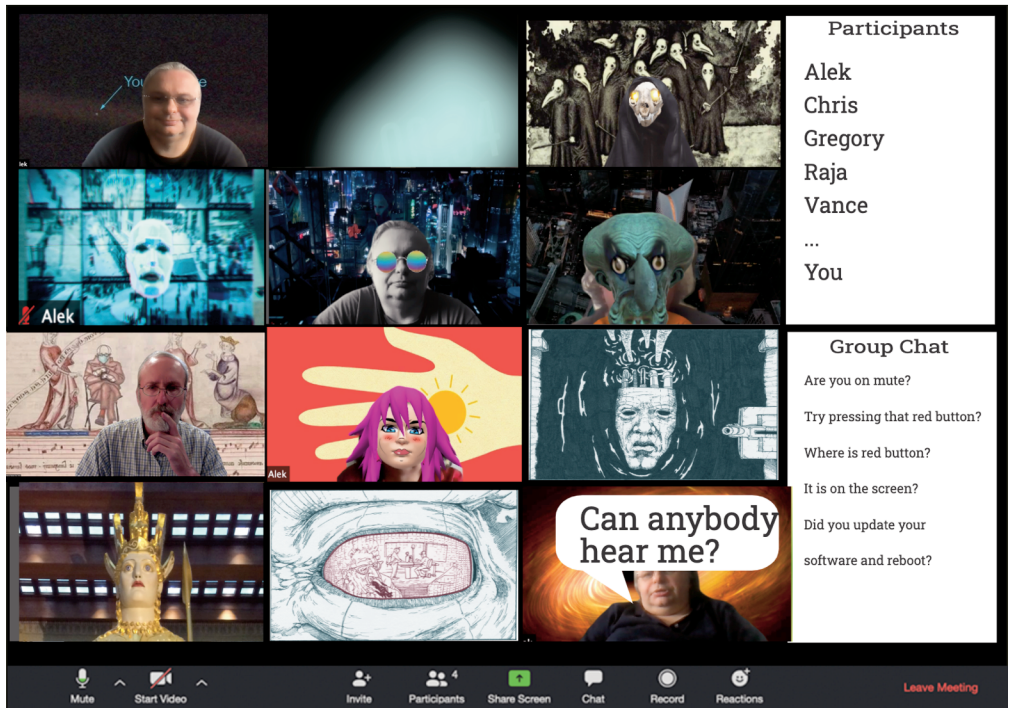


LOOP GAROU 06

Science Fiction, Fantasy, Horror, and Comics Books

“We’re back!”

The Metaverse is here and we are inside!



Living in the Metaverse
Letter to Loop Garou
Practice Makes Perfect
Nashville: Summer of 2020
Interlude
Out of Chicago
A Plague Of...
The End Game
Brothers and Sisters
Fallen Bird

I Got It From Agnes
Accepting the Unacceptable
Ramblings on Star Trek: Plagues
and Pandemics
Review of The Nevers
Another Review of The Nevers
SFDG COVID-19 Questionnaire
and Responses
Afterword

LOOP GAROU 6

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Illustrated by BENJAMIN SPECKLIN

Illustrated by LEE SARGENT

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Ignacio Viglizzo (“Letter to Loop Garou”) is a science fiction reader who works as a mathematician to pay for his hobby. He lived in Bloomington, Indiana for a few years where he joined the SFDG. Now he is back in his hometown Bahía Blanca, Argentina, and keeps acquiring more books than he can read.

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EPIGRAPH**MICHAEL SULLIVAN**

It appears that everyone is on board with postponing our meeting. Really? Like to next month? Next fall? Next year? There is a part of you—the SFer part—that knows our lives have already changed irrevocably. We’ve moved from just reading SF to experiencing one of its radical shifts first hand. I cannot remember a comparable change in my lifetime. Our moon has not exploded, but the old ways of doing things are indefinitely suspended if not ended. I feel an overwhelming urge to deny what’s happening, but that’s not helpful.

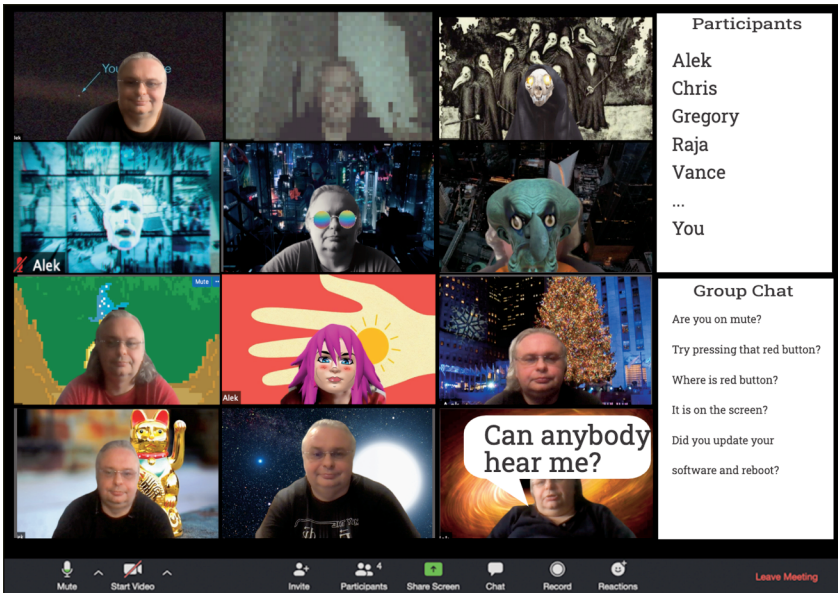
We’re all curious to see when restaurants will reopen and when we feel safe enough to shake hands and sit around a table. Apparently we’ll need to bury a bunch of people first, and we may need to develop a vaccine too before we feel that safe. This situation is not going to resolve next semester. I’d suggest that SFDG start exploring new approaches now, and my bias is toward videoconferencing rather than email. “Postponing” sounds like denial to me.

— MICHAEL SULLIVAN, MARCH 17, 2020

LIVING IN THE METAVERSE

ABOUT THE COVER ART

ALEK SLOMINSKI



How is it to live in the future? How is it to experience a sci-fi movie in real life? And how many of us expected that instead of an end-of-time

apocalypse we would end up connecting with video calls, living in an early version of the Metaverse?

The cover captures that fantastic (or horrendous?!) experience where our universe and how we talk to each other is no longer limited by physical distance. Anybody can connect from anywhere. And can be anybody. After all, what counts are the pixels we see on screen.

The pandemic made it possible to re-connect to people I knew in Bloomington through SFDG and that was one great and unexpected benefit of all of us living a virtual life.

Best,

Alek

P.S. Next pandemic we may have the “real” Metaverse ready?



LETTER TO LOOP GAROU
CORRESPONDENCE
IGNACIO VIGLIZZO



DEAR FRIENDS OF THE SFDG,

I remember fondly the years (1999 to 2006) I lived in Bloomington and got to join the group. I was going to start mentioning the people I met there but the list got too long, and with its length, the certainty that I would forget someone also grew. It should suffice to say that it's all good memories, and that lifelong friendships were forged there. Also, great and awful books were discussed, discussions both deep and silly, but always fun.

Then I had a brief visit in 2008, and I kept eavesdropping on the conversations on the mailing list. But the first big reconnection came with the pandemic of 2020. Covid-19 forced us to stay at home but by

then, the technology allowed for reasonable teleconferencing using the internet.

There was another big one when some of us uploaded and had that clubhouse in the cloud, but that was short-lived because you-know-who started spawning (thinly-disguised) clones of themselves just to get a majority in the discussions. Or maybe it was cut short by the first alien invasion, I don't remember which. Those were some paranoid times, but some of my instances remember having fun then too.

Anyway, I hope the postman gets this letter to you in time for the new issue of *Loop Garou*!

Best,

Ignacio

P.S. Now that inexpensive time travel is almost reliable, we could go visit Sir Arthur C. Clarke as planned. What could go wrong?

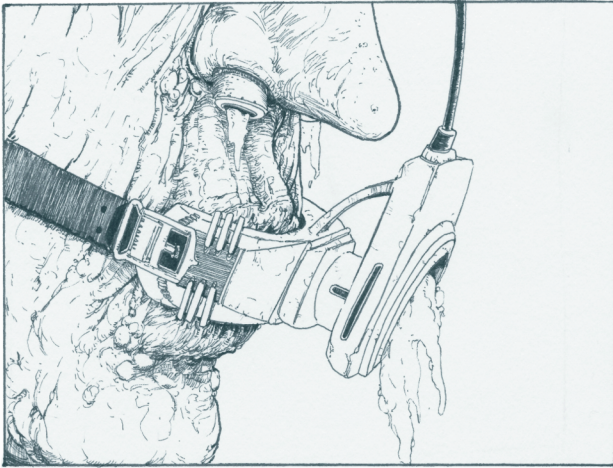
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PRACTICE MAKES PERFECT

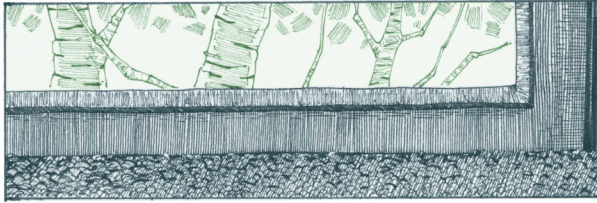
FICTION

CHRIS AIRIAU

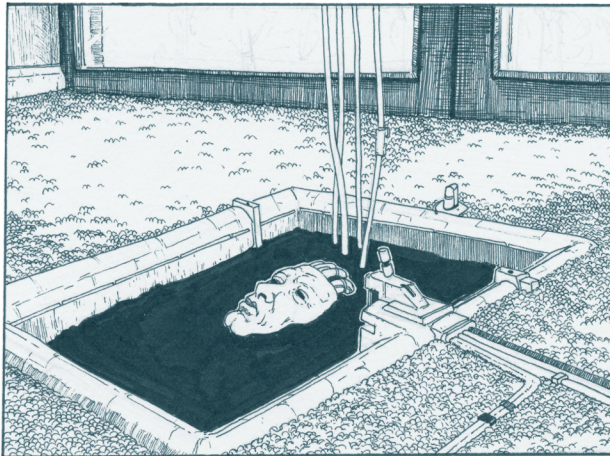
Art by Benjamin Specklin



They killed me hundreds of thousands of times.



I bled my insides out.



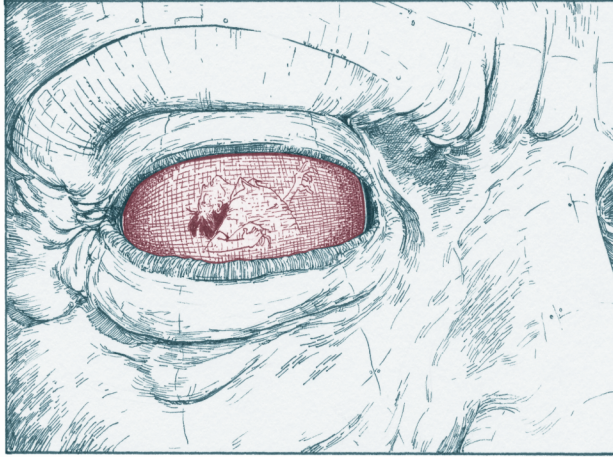
My mind melted from the simulated world...



...that was my only reality. Then, reboot.



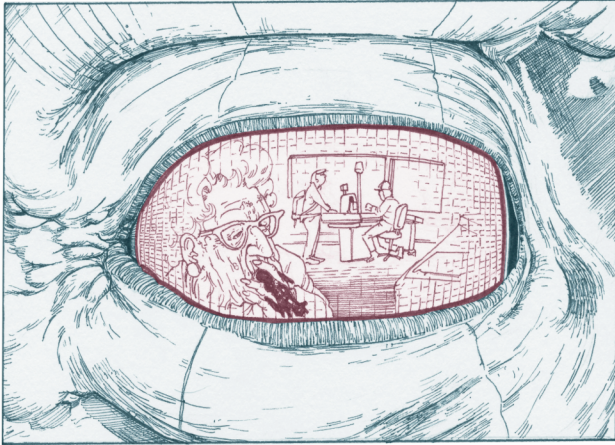
I had bleeding ftu,



spontaneous paralytic muscular torsion,



cholera pox,



rooster fever.



The epidemics came too fast...



...for me to worry about names.

I WAS the only one with any memory of my previous life, the only one with any idea how to flatten the curve. My presence was no oversight. They let me remember their plan, that they gave me roles of varying importance in their simulations so I could fight their biological attacks more effectively. After a few thousand iterations, I was certain the people I used on my teams were subconsciously primed to act in my favor.

The disease vector and the delivery site changed, but the sickness was always hidden in meteor showers. Recovering the meteorites was priority number one when I had the hierarchical power to give priorities. My teams discovered viruses, retroviruses, proto-viruses, bacteria, fungi, prions and parasites. The worst we couldn't name, but all of them changed during and between iterations until total infection was achieved in under three hundred hours during my "normal life" simulation. Survival lasted longest under quarantined HAZMAT totalitarianism, plastic suits plodding between bubbled safe zones. We never lasted more than two months. And each time I died, I reappeared as a ghost, an invisible avatar displaced around the world to witness scenes of strength and madness. They wanted me to learn how to survive better, or so I thought.

I tried to save lives. I tried every time.

In the final iteration, they released them all, by all vectors.

Humanity didn't even last twelve hours. Alone, I roamed the emptied simulation, the final human ghost. Or so I thought.

We found each other, a city of specters trained against the worst.
And we're planning.

Unless they decide to turn us off.

NASHVILLE: SUMMER OF 2020

FICTION

VANCE REESE



WHENEVER I GO TO NASHVILLE, Tennessee, the “Athens of the South,” I pay a visit to the Parthenon, the temple of Athena. It was closed due to the pandemic, but I borrowed a key from a fellow worshiper.

I expected to hear the usual murmuring when I went inside, but

that night it was eerily quiet. I asked Athena about it, and she said there was a momentary respite from the battle.

Grateful for the quiet, I prayed to Athena. She gave me the guidance I have come to expect, then paused uncharacteristically. Was it my imagination, or did Nike fly down to present me with a laurel wreath? I am not the Protector of Nashville. Athena has that job; it is too big for me.

The gray-eyed Goddess spoke: She wanted to announce her living presence to her people. She would bring unity, prosperity, and peace.

With so many churches around, how would this be possible? As if in answer, the familiar murmuring of the battle between the Giants, Titans, and Gods returned. Athena's bronze shield escaped the pedestal, rolling toward me. As I moved to stop the shield, I seemed to grow, and Athena seemed to shrink as she came down to the floor.

I stepped up on the pedestal and turned to face down the hall. I held the shield to protect the snake and heard it hiss gratefully. As the murmuring continued, I opened my right hand, and Nike flew up to perch on my palm. I felt powerful and protective. Was the summer humidity and arthritis also making me feel stiff?

I recognized Athena below me, now dressed in a business suit. I could barely see her gray eyes from this height. I wanted to tell her I would help fulfill her mission despite the Protestants and other obstacles, but my mouth was beginning to feel rigid.

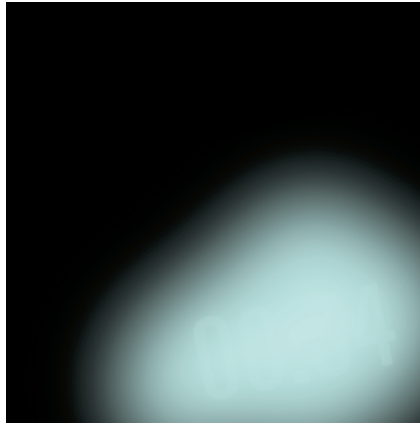
Athena bowed toward me, which didn't feel right. She turned and walked to the large, heavy doors at the end of the hall. She opened them with ease and walked into the night.

Perhaps I'll just stay here guarding the snake and holding Nike until she returns.

—Vance Reese, July 2021

6

INTERLUDE
FICTON
RAJA THIAGARAJAN



17

Why was it so dark? Why was it so cramped? She wasn't prone to claustrophobia, but what about the air? It couldn't be circulating, could it?

16

It wasn't fully dark. She saw a dim light swimming in the darkness. What color was it? Azure blue? Aqua? Aquamarine?

15

Why was she here? Who was she? What had happened to her memory?

14

Was she all alone in the world? No, she had a daughter. And a face, a very young face, that wasn't her daughter, but someone as important to her. Someone *more* important to her.

13

She looked toward the aquamarine blur. It wasn't quite aquamarine. It was something else—

12

—and it wasn't a blur. It was a set of lines. It was symbols. It was numbers—

11

—and they were counting down.

10

There was something about a process. She had agreed to take part in a process.

9

It was a process that had been tested, had been refined, but it was still fallible, it still had the possibility of failure—

8

—but it was absolutely necessary to go through the process. If she didn't, it would be impossible for her to survive what came next, what had to come next, what would take—

7

—what would take a long time. She would have to be in this place, in this cramped dark place, for a long time. Minutes? She would run out of air! No not minutes—

6

—not minutes, not hours, not days—something didn't quite feel right—

5

—how long could human beings go without food? A week? A month? But that assumed thorough hydration, a liter and a half of water a day. And she had no water—

4

How long could she last without water? Surely not more than a few days. But this place where she was, it was sealed, it could not be opened—

3

—this place was designed not to be opened until decades—*decades*—had passed—

. . .

2

—but the design would only work if everything was in balance, if powerful medicines were pumped into her body—

1

—and she couldn't feel any medicines, she couldn't feel anything that could carry medicines into her body. She couldn't feel anything—
—except a rising panic—

0

OUT OF CHICAGO

FICTION

RAJA THIAGARAJAN



“THERE’S a delivery at the lock. Can you take care of it?”

I started to give a snarky reply, then saw all the red lights on Franklin’s display. “Ok, but you get the next one.” I climbed the East Flight, and was barely winded when I reached the top. The lock opened, and I saw the boat at the end of the dock. “Peter! It’s nice to see you again.”

He looked a little ill, and not just from the choppy waves. “Dr. Best, hello. I have a package for power storage, and two packages for breathing systems.” He showed me his pad, and I double-clasped my hand. A small float detached itself from the boat and headed into the lock.

“Thanks, Peter. We’ve been hoping to reach self-sufficiency ahead of schedule, and this will help.” I started to turn away, but stopped when I saw his expression.

“Dr. Best, could I talk to you for a minute?”

“Sure, go ahead.”

“I’m sorry to bother you, but my grandfather made me promise... He raised me when my parents died.”

“I’m sorry.”

“When I was younger, he told me to always set a little aside, you know? He said there’s things you can’t do anything about, but if you have a little set aside, it can help. Anyway, he worries sometimes. He says it’s because of the way he lost his first job back in ’20. You remember about that?”

I nodded. “The pandemic then.”

“Yes. One of the stories he told me—They were trying to finish a project by the end of the month, when the main office contacted their division head. That afternoon, they sent everybody home, just a little while, they said, nothing to worry about. Grandpa’s boss asked if they could get an exemption to finish their project, and she was told the deadline was postponed. Five months later they *still* weren’t back in the office, and Grandpa and a bunch of junior employees got furloughed.”

I nodded. “I’ve read about it. At first, nobody was sure how many people would be affected, or how long it would last.”

Peter said, “Well, Grandpa asks if you’ve been following the news out of Chicago?”

I hesitated, then said, “Yes, I have.”

“You’re a doctor of epidemiology, right? Can you tell me something so he’ll stop worrying? Tell me he’s wrong?”

I paused for a moment, then said, “I’m not sure that he is.”

A PLAGUE OF...

FICTION

RAJA THIAGARAJAN



“—TRINA, DO YOU HEAR ME?”

She blinked. “Yes.” Katrina focused on the young woman. “You’re Agra, right? Director of life-support/nutrition?” Her eyes wandered

past the young woman. "I recognize those lights. We haven't arrived yet?"

"Correct. Do you remember me explaining why we Woke you? No?" Agra took a breath. "Ok, Wakening can interfere with long-term memory storage. Basically, we're 17 years out, but there seem to be some protein imbalances, and there's an unusual noise in the agricultural pod."

"Agricultural pod. You think there's an equipment problem?" Katrina blinked again. "Of course you do, or you wouldn't have Wakened me. Sorry, it's the memory blockage. Have they opened the pod yet?"

"The team is at the airlock. About five more minutes."

"Unusual noise? Can you play it for me?"

"Sure." There was a high-pitched sound, somewhere between a chirp and buzz, that kept playing continuously. "Do you recognize that?"

Katrina smiled. "Phaser on overload."

"WHAT?"

"Sorry, sorry, just a joke." Katrina frowned. "I don't think it's an equipment sound, but I *do* recognize it. Can you give me access to my personal messages?"

"Pers—Ok, your hands seem steady enough. Go ahead."

"I'm thinking. My granddaughter sent me a message just before we left. If I remember correctly—Here we go." A message started up, showing a young girl greeting her grandmother and talking about her day. The girl opened a door and stepped outside to bright sunlight and a loud noise. "I think that's it."

"What *is* it? What's that sound?" There was a notification of an incoming message for Agra, but she ignored it.

"It isn't an equipment sound." The view changed, showing a large red maple tree with hundreds of tan-colored shells at the base. The view tilted upwards, revealing a dozen dark insects flying around the tree. Katrina said, "I think it's periodical cicadas."

Agra's eyes widened and she opened the connection. "Airlock team? Stop what you're doing! We don't want to open until—What? Too late??"

No, they're harmless." She looked toward Katrina, who nodded. Agra continued, "Well, whatever you do, don't let the protein escape!"



A FEW HOURS LATER, Agra came back, and said, "Okay. As far as we can tell, the temperate-agriculture supplier sourced their soil from the American midwest. Things are out of balance, but as long as we close the cycle we should be fine. Unfortunately, the automated feeder is down for a week, so we'll just add them to our meals—" She saw Katrina grimace. "What? Is there a problem?"

Katrina said, "No, I just don't like eating bugs."

THE END GAME

FICTION

CHRIS AIRIAU



MY NAME IS TOMÜBERALLES. I was bred to be a fingertwitch maniac. I scored a multi-million dollar contact at 18 years and two seconds old and the hottest Tweak top contributor of all time, KatyPlay—met in the biz, you know. I was obvs the first recruit when the aliens declared war.

A swarm of spikey-ass spaceships ripped through the solar system, launching all sorts of satellites, asteroid harvesters, and what ended up

being several hundred solar laser arrays to blast our planet to crispy shit. The worlds' various militaries had their interception "peace vessels" shot to pieces by x-rays and EMP bursts (well, not really pieces, cuz the Stripes tell me it's not like in the movies, which bummed me out, but Katy quickly cheered me back up with some Leia-style role-play, meow). That is, they all were destroyed except one rugged hunk of American spy hardware that managed to latch onto some alienware and send a bunch of data back Earthside.

Tbh tho, w/o all those foreign hackers all up in the US's shit, we'd never have found the weakness in the system.

The US Navy had two years while the alienfucks grav-braked around the Sun and those fat farty gas planets. Their plans were in our hands, and the geniuses at NSA reconfigured the relay system to replicate the team running classics my generation was raised on. Before those alien bastards knew it, I'd be wiggin out all over them.

My team, HumansÜberAlles, play-hacked their sats one-by-one, two-by-two, until we had the covert program fully installed so that the solar laser beams would fuck the Mothership UP. Also, I got KatyPlay pregs. TWICE. That way, my sons can helm the dynasty if the alientards decide they need more fucking up. Or my son and daughter, a daughter would be cool too.

The day came, the final hour when we had to drop the directives at the last minute, with only a second left. Game Over, Aliens. We popped the champagne and watched those sats turn around and focus their laser beams into one huge fucking column of yellow-white plasma that shot directly at our planet.

WHA?!

The screens showed all the people falling and dying, and then my sight went all red with blood and shaking, heat surging through my spine and tearing through my belly, and my body opened like a blossoming flower filled with organs.

And then the White House also exploded.

BROTHERS AND SISTERS

FICTION

RAJA THIAGARAJAN



“ALL RIGHT, Dray, I’m here. Can we talk now?”

He waited until the door sealed behind her, turned the dial to empty the air between the walls, and smiled. “Of course, Del. Any time. So what did you want to ask me about?”

“I ... well I don’t want to hurt your feelings ...”

“I’m your brother. Brothers forgive.”

“Ok.” Del’s mouth curved slightly. “Don’t be upset, but I want to know what’s in the computer in my selfship.”

Dray's eyebrows rose. "You always complain when I talk too much about my computers or my jobs."

"I know, but... Ok, so the Vulps advertised that special courier job, manual certification required. I applied, but they turned me down. Then yesterday *they* reached out to *me* and offered 20% over the going rate. I asked what changed, and they said it was because they found out *you* set up my computer."

Dray gave a short laugh. "Yeah. I helped them set up *their* system. They were very happy."

"Dray, I, I, I— You know I can't get involved in anything illegal. We had that trouble last year. We lost several jobs, even though the courts finally ruled in our favor. And—" Del lowered her voice. "When Mom was dying, she made me swear I wouldn't do anything she wouldn't approve of."

"I know." Dray's eyes drifted away for a moment, then he looked back at Del. "Don't worry. There's nothing illegal or immoral or even shady involved. The Vulps just really value their privacy. They need to move packages from location to location, and they don't want *anyone* except the people directly involved to know exactly what's going where and when; not their enemies, not their friends, not even most of their employees."

Del frowned. "But couldn't their competitors just look up the public docking records?"

"There's not enough detail in the public record."

"But what if they got a court order to clone my computer?"

"They could try. I'm pretty sure Vulps would help us fight the order."

"But if they *did* clone my computer—"

"It wouldn't do them any good. They wouldn't be able to figure it out." Dray laughed at the expression on her face. "Sorry. Ok, you asked about your selfship computer. You remember the hardware and mass bill?"

"How could I forget? It was five times the standard."

"It wasn't *that* bad, but—ok, never mind the details. To the outside world, your selfship computer looks a little outdated and slow. Inside—well, there's a virtual machine running some handmade software. The

upshot is that all records more than a few days old are deeply encrypted. They can't be decrypted without the keys."

"Which you keep on you."

He shook his head. "Which I have memorized."

"So you set us up with a very powerful computer to encrypt our logs without slowing things down?"

"Not exactly. The encryption is difficult even for this machine. I figure that under the worst circumstances, the autonavigator might run 20% slow. That would be a problem, except—"

"Except I'm manual-certified and don't use an autonavigator."

"Exactly." Dray took a deep breath. "Look, I wanted to tell you something ever since we set up the computer." Dray told Del the keys, then said, "I know you'll remember those keys as long as you remember our family."

"Dray, you should have told me all this long ago."

"I know. I tried a few times, but, well, you know how I get nervous and go into way too much technical detail, and then you complain, and we get bogged down. But—" He paused for a moment, then said, "I'm really sorry. Can you forgive me?"

Del smiled. "I'm your sister. Sisters forgive."

11

FALLEN BIRD

FICTION

RAJA THIAGARAJAN



THE WOMAN ANSWERED THE DOOR. She had straggly blonde hair and looked listless. I said, "Good morning. I'm Wanda Thorne. You're Delores Frisk, right? I think Shaniece told you to expect me?"

The woman nodded dully and let me in. She said, "Did I do something wrong? Is Shaniece mad at me? Are you my new counselor?"

I said, "No, honey! Not at all! I'm a friend of Shaniece's, and there's something she asks me to do for her fallen birds after a few weeks. I'm not a counselor or psychologist. I want to emphasize that I have nothing against them; that's just not what I do."

"What do you do?"

"I teach General Relativity to high schoolers."

The woman frowned in puzzlement. "Shaniece cancelled today's counseling session so you could teach me General Relativity?"

I smiled. "Sorry. I think I may have answered the wrong question. Down here, when you ask what someone does, it means what do they do to get a little more than their UB. But that's not what you and I are going to do today. Do you mind if we get in the car? It's estimating a twenty-five minute ride."

She nodded once, and we went to the car. Once it felt we were secure, I told it to head to our destination. Delores said, "CF Enterprises? Isn't that an amusement park?"

I smiled. "That's right. There's a ride there that I take Shaniece's clients on. But do you mind if I keep it a bit of a surprise?"

She nodded dully and fell silent. I said, "So, you're an orbital. Can you tell me a little about yourself? Like what do you do?"

"I have—I *had*—my selfship, and did all sorts of odd jobs for clients who wanted the human touch. My selfship and I were certified for manual operations."

I whistled. "Congratulations! I think only one other of Shaniece's clients was certified manual. So you're probably an expert in orbital dynamics. You must have a great intuitive grasp of it."

Was there a hint of light in her eyes? "I won two of the last four Manual Competitions, yes. But then there was the accident. I had to use the SEREV and splash down." She fell silent again.

I asked gently, "Was your selfship damaged?"

“Yes, but I kept up with my payments, so they recovered and refurbished it. It’s ready for me, once I get back on orbit.”

I said, “And you’re accumulating your UB for the trip back?” She nodded. I continued, “A lot of Shaniece’s clients do the same. But Shaniece tries to help them with their feelings. Splashdown and the things leading up to it are traumatic, and she wants them to be in better shape for when they get on orbit. And besides, if you’re down here, you might as well take advantage of the opportunities.”

She looked thoughtful. Our car arrived at the drop-off area, and I paid it off.

I said, “Ok, I need to load your pass to your band. Is that all right?” She held her left arm towards me, and my band sent the pass to her band. Her band chimed when the transfer completed.

We entered the park. “The place we’re going is to the left. Do you see that hundred-meter tower?”

“Ok.” When we got close, she said, “Why is it called ‘Tower of Doom?’”

“Don’t worry about it. You have a special pass that lets you go to the head of the line. Just strap in. I’ll be waiting for you at the bottom.”

“You aren’t coming along?!”

“I used the money to get your special pass. Don’t worry, you’ll see me very soon.”

For a moment, I thought she was going to balk, but she chose a seat on the large ring around the tower and strapped in. The people seated next to her were looking nervous, but she didn’t notice. The ring started to climb up the tower, spinning slowly so the riders could see all sides of the park. I walked around to track her seat.

The ring stopped spinning and reached the top. It paused for a moment, and then it dropped like a stone.

She look startled, then smiled, and by the time the ring started slowing down, she was grinning ear-to-ear. Four seconds of weightlessness isn’t much, but it was more than she’d had since splashdown. She was still grinning when an attendant unbuckled her, and shooed her toward the exit.

My smile was almost as big. “What do you think, Delores? Was it worth coming here?”

She said enthusiastically, “Please call me Del! That was great! Can I go again?!”

I GOT IT FROM AGNES

MUSIC VIDEO

VANCE REESE



“I GOT IT FROM AGNES” is an infectious little song by singer-songwriter-satirist and mathematician Tom Lehrer. Lehrer had it in his live repertoire, but the Wikipedia says he didn't record it professionally until 1996.

In 2020, at the age of 92, Lehrer placed all lyrics and music written by him in the public domain.

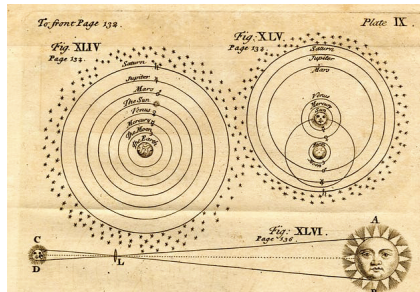
Vance Reese made this video recording. Having cut his musical teeth on Spike Jones, and P.D.Q. Bach, he has always had an infection...

er...affection for humorous pieces. He is thankful that “Agnes” gave him nothing more serious than an ear worm. This video is specifically placed in the public domain.

“I Got It From Agnes” Music Video:

<https://youtu.be/EKy8RrNiXxA>

ACCEPTING THE UNACCEPTABLE
NONFICTION
GREGORY RAWLINS



IN THE LONG RUN, neither food nor labor nor materials nor energy, nor even current tools are limits; knowledge is.

It's valuable, but gaining it is hard and requires tools. It seems likely that, besides physical and institutional tools, and tools like cities, there are mental tools, too, and science is one of them. How, though, does science work? When does data become fact? How does fact turn into knowledge?

Jump back to England in 1812 and suppose you find a curious-looking stone lying on the ground. It's so symmetric and intricate that it looks like part of the skeleton of something that once may have been

alive, but like nothing alive now. What do you make of it? You, like every educated person you know, were brought up on Aristotle and the Bible, so you assume it must have been designed to some purpose.

But who designed it, and to what purpose? Perhaps a sculptor made it, then lost it? No, you find another one, just like it, except half-buried. An elaborate hoax, perhaps? Or perhaps both stones are long-lost religious or magical or art objects? No, you find another one, half-embedded in a rock. Nobody could have made that.

You ask the locals, who long ago gave such stones names—dragon tongues, devil's toenails, snakestones, thunderstones. They tell you many colorful tales to go with the names. They also tell you whether the type you found will cure arthritis, prevent snakebite, ward off the evil eye.

Normally you would accept their tales; after all they have lived in these parts for centuries, so surely they know best. But these aren't normal times. Britain is, as usual, at war with France (and now the new United States) and, more importantly, its industry is growing. Since it hasn't invented the railroad yet to link its manufactories, it needs canals, and you're exploding your way across the country to make one. As you do, you find more such stones. But locals in different places tell different tales. Those can't all be right. Also, much of Europe is now buzzing about its newest sect (the as-yet unnamed "scientists"), and you want to be part of that new crowd. Perhaps these strange stones are your ticket in.

With each new stone you find, once granite-solid foundational beliefs begin to slip and wriggle away like tadpoles in your hand. The differences in the stories you hear force you to try to pierce a veil so hidden that others around you can't even see it.

So, after long thought, do you then conclude that those odd stones were formed when certain animals went extinct millions of years ago, then their remains absorbed minerals and thus turned to stone as they slowly got buried over time?

Fat chance.

That would be far too huge a leap from what you know—or rather, think you know. From childhood, you have believed that the earth is

only about 5,800 years old. You believe that because everyone around you believes it, and because it's based on careful, detailed, and centuries-long, Bible studies. How could it be wrong?

(Although, were you living in India in 1812, you might believe that the earth was billions of years old. But then, you wouldn't be blowing your way up across the country; nor would there be an odd new profession for you to want to join.)

For you, "millions of years" is an unthought.

"Extinction," too, is, for you, an unthought—because you also believe, following both the Bible and Aristotle, that all living things have always existed. Since the odd-looking stones don't look like they belong to anything alive now, they couldn't have been part of something alive before. After all, God wouldn't make something, then unmake it.

(Although were you living in France in 1812, you may hear some recent wild talk of finding "monster bones"; but even if you do, you likely pay much more attention to France's current invasion of Russia, and anyway, few of Britain's devout naturalists are inclined to believe such craziness yet.)

Besides, you know nothing about permineralization (the slow seepage of minerals into a dead thing, forming a cast of it), or even how rocks form—or even that rocks *can* form. That's also not a thought you're ready to have yet. Finally, just as Aristotle had said two millennia before, you believe that flies spring from rotting meat, and eels from mud, and so on.

Obviously.

So what do you conclude? Well, perhaps something like this: Those strange stones you found must be failed results of mud's urge to turn into life.

Why not? Such a guess would fit into the jigsaw puzzle of everything you (think you) know. And saying so might not get you laughed at. It might even get you funding. So you're more likely to think it and say it, and folks hearing you are more likely to believe it and spread it.

The things you're likely to think don't merely depend on what you

see, or even what you think you see, or even what you notice about what you think you see. Your thoughts also depend on what you know (or rather, believe), plus what's already accepted by the groups you belong to, or wish to belong to. Everything else is an unthought.

Coming to such a conclusion, even after years of effort, isn't insanity or stupidity. It isn't even ignorance, exactly. It's more to do with your ignorance about your ignorance. You don't know what you don't know.

Further, publishing your guess might even change how others see the stones they find, or have found; they might even begin to think as you think—seeing through your eyes. If so, you would have changed their eyes, just as Aristotle, the Bible writers, and so many others in the millennia before you, had changed your eyes. When you spread your guess around, you aren't merely describing the world, you might also change the world—even though what you're describing isn't the world, but what you think is the world.

Everyone sees through a glass, darkly. All anyone can do is fill in the gaps around their guesses with what they think might be true. Emotion, intuition, maybe even instinct, color and bias all human thought. So, often, people have to first believe something before they can even see it. And if that belief then spreads widely enough, it becomes hard to unsee—whether it's true or not.

It's often not so much “seeing is believing” as “believing is seeing.”

Now, none of that is science. It's normal human behavior. Everybody creates, amasses, recombines, and spreads guesses about the world. Testing those guesses, though, is another matter.

You then learn that the new crowd you want to join tries to do so. Then you realize that your guess about mud wanting to turn to life may not explain much. After all, why don't you find the odd stones everywhere, and in all layers you dig down to? What was special about where you found the stones, and the layers in which you found them?

Then you wonder: If your guess were true, what else must it mean? Because if something it implies were false, the guess couldn't be true. So: can you think of anything that someone might find in future if your guess wasn't true?

Or: can you think of some instrument that others might one day build to help them find such a thing?

Or: can you use math to narrow the possibilities for your guess? Maybe by modeling mud's propensity to spawn life? Where must the mud be? How long must the mud be there? What kind of mud? How much mud? Mixed with what? At what temperatures and pressures? And so on.

Now, that's not normal. Human beings aren't born as intuitive scientists; they're more like intuitive lawyers. In a debate, nobody wants to come up with arguments for the other side; time and effort spent doing that means less time and effort bolstering their side. Most debate isn't so much about learning the truth as winning the case.

Normally you want to "prove" your guess, not fail to disprove it. Also, constraining it gives rivals a better chance of disproving it. Plus, coming up with such a constrained guess is harder. But, strangely, that strengthens it. Although people more easily believe things that fit in with already accepted beliefs, whenever they try to disprove something, yet fail, the more likely are they to believe it. Further, even if you can't think of any constraints on your guess, trying to do so might still be useful were that effort to at least help suggest that earlier guesses were just that—guesses—and not the granite-solid pieces of knowledge that everyone had so long mistaken them for.

Then, if your guess becomes popular, others might try to test it, extend it, attack it—seeking their own bit of fame or excitement or insight—modifying it based on special things they know about mud, or other strange-looking stones, or odd animals in out of the way places. As they test the guess by pouring in test tubes, scribbling on black boards, digging in strange places, it warps and changes. Passing from hand to hand, it might still carry your name, but eventually it won't be your guess at all; it will be a group-guess about what may have caused the odd-looking stones. Over time, it will grow to fit closer and closer to everything that's known—or, having hit something insurmountable, or seemingly so, it will get thrown out entirely.

Finding a fossil in 1812 (or 1712, or 1612) is much like finding a thrown stone. Throwing a stone into some bushes at night then

figuring out where it lands is hard enough, but finding a stone then puzzling out from where, and when, it was thrown is quite another.

That's closer to real science. It isn't only about seeing something odd, nor just about guessing, nor simply even about testing, nor is it the effort of a lone Robinson Crusoe, but of a large group, as they see, then guess, then test, then guess again with ever more constrained guesses.



THE SCIENTIFIC EFFORT is like a troupe of amateur actors putting on an improv play. Unlike the usual improv, though, those actors don't merely lack a script, they also lack theater experience. Plus, they can't see backstage, and there are no stagehands or old pros to explain how anything on stage works. And the stage is strange and new to them, full of colorful and noisy moving scenery and props. So, in the middle of a busy and inexplicable stage, they aren't merely improvising dialogue, they're improvising ideas about the (unseen) backstage rigging, which, behind the scenes, must be (somehow) operating all the moving scenery, props, lights, sounds, smells, and special effects.

So, helter-skelter, they just decide to call this big moving light in the sky "the sun" and that other one "the moon," and this loud noise "thunder" and that bright flash "lightning." Labeling an odd stone a "fossil," styling a common behavior "gravity," and dubbing a moving smudge in their microscopes a "microbe," simply lets their play continue.

Such names, chosen on the spur of the moment, lack much meaning. The troupe names common things based on what they do, or their looks, sounds, smells, and so on, and it names strange things

(often using Latin or Greek) by analogy to common things. But where did those things come from? How do they work? What are they? When they were named, no one knew. For instance, at first the word “fossil” just meant (the Latin for) “odd-looking dug-up stone” (which once included jewels). The word “moon” probably just meant something like “sky-light that regularly waxes and wanes.” And the word “gravity” perhaps just meant “the feeling of heaviness.”

But the play’s the thing. As it goes on, the troupe tries to figure out each name’s meaning by simply guessing relations between names, and trying to think up tests for those relations, thus making them testable. They also keep a record, for each name, of all related testable guesses (which get renamed “hypotheses,” a Greek word that just means “suppositions,” or things placed under theses). Then, if those get tested enough, they get renamed again as “theories” (another Greek word, meaning accepted “ways of looking”). That record of guesses includes all the guesses that the troupe later found to be wrong.

Those meanings, even of seemingly simple words, like “sun,” are so hard to figure out that the play has to go on for millennia. Each generation of troupers hands its record of names, and guessed meanings of those names, on to the next generation of players, which gets to use the last generation as its placeholder stagehands and old pros. That way, each new generation starts with all the guesses that are either known to be wrong, or that so far sound right, but may still be wrong.

Thus, troupers, on seeing a dim smudge in the sky that seems to move a bit like a planet, but too slowly, can’t call it a planet until it’s seen many times—and that’s checked by many others—and the math of its orbit is fixed. Only then can it become Uranus. That takes almost a century. A tool (the telescope) was crucial in that effort, since the smudge was too far and too small to see by eye alone, but it couldn’t come along until after many other things had—from the eyeglass to the camera obscura—all of which themselves took many centuries. Uranus couldn’t exist until long after the telescope existed. Then actors, looking into telescopes pointed at Mars, thought they saw canals. Only until a Mars mission did it become clear that no such canals existed. That, too, took almost a century.

Similarly, players using microscopes thought they saw some blurry smudges inside cells. But given the weak microscopes at the time, and the weak understanding of cells at the time, they couldn't conclude anything—until many claimed to see it—and could show it—and many others agreed—and proposed ideas for what it might be—and one idea won out. Only then could the smudges become mitochondria (from the Greek for what one looks like: “little grain of thread”). That took over a century. Mitochondria couldn't exist until long after the microscope existed.

Uranus, Mars canals, mitochondria, nothing was certain for long periods.

Without first knowing what's backstage, how could the troupe tell whether what it seems to be seeing onstage is real, a figment, or just a smudge? To truly see some particular piece of data, the players first need a theory of what they might be seeing. But theory without data can incite dreams—as can data without theory. Both are necessary or the play becomes such stuff as dreams are made on.

Thus, for centuries “atom” had meant (the Greek for) “(teeny tiny) uncuttable thing”—until, oops, one day some troupers split one apart—after which they had to make up new words, like “subatomic,” a word that couldn't exist before then because it was, by definition, an unthought. Like “atom,” all the troupe's words are meaningless in themselves, since each one was first named by a generation least able to understand what it was, yet each now stands for a whole network of testable claims.

That's true not just for today's strange words, like “subatomic” or “mitochondria,” but also for what once were strange words that now are everyday words, like “sun” or “moon”—or “gravity,” “microbe,” “air,” “heat,” “vacuum,” That's also true for words that once were strange but which have since been thrown out, like “humors,” “miasma,” “epicycles,” “phlogiston,” “cold fusion”....

Once the troupe thought it saw any word, whether accepted today or not, whether now in the background lexicon or not, they couldn't unsee it without major effort. Just so, the players still use nonsense words like “sunrise” and “sunset,” even though they know for sure that the giant thermonuclear ball called “the sun” neither rises nor falls. But

none of the words truly matter; it's their attached meanings that count.

The word "fossil" today means something much more complex than it did in 1812, but only because of centuries of work by tens of thousands of troupers over millions of hours. In one word it now conjures an entire world-view, a way of looking, a densely linked network of beliefs about how things work. The word has meaning only because it's attached to many theories—testable models of reality that have also been tested for a long while now: theories about animals and plants, about rock formation and water flows, about planets and planetary dynamics, and so forth. Picking up a fossil today isn't like picking one up in 1812; it's more like trying to pick up a single jewel in Indra's net—every other jewel in the net is reflected in that one jewel.

As the Great Detective might have it, the players may "see but do not observe." But he was wrong to follow that up with: "It is a capital mistake to theorize before one has data." Maybe he could suspend judgment until all the facts were in, but the players can't. There's never enough time. Even if there were, the facts could never all be in because not all of them would then be "facts"; the troupe would merely believe they were at the time.

More often, the troupe comes across some things that look like facts then leap straight from them to conclusions. Then it backtracks, checking here and there to try to keep itself honest. But it can't check everything. If it ends up with some demonstrably false result, it starts over and tries to re-see the "facts" all over again. In that way it tries to weave both spotty data and tenuous theory into one cloth of "knowledge." But it can never be certain the resulting garment fits anything real.

The troupe isn't on some orderly march toward "The Truth." Think, rather, of a mass of termites scurrying about with little balls of mud, and dropping them almost willy-nilly. Every now and then enough of the right sort of them bump into each other at just the right time in just the right way for them to drop their lumps close enough together and that new cluster of data and ideas lights up the whole nest. Such flashes of insight into how things work can change many things, but the termites can't foresee them because they can't see much

beyond their antennae. So deep insights are rare, and, so far, unpredictable.

For the improv actors, never able to see backstage, but always trying to figure it out, data can only become fact for the moment, and fact can only turn into knowledge for a time. Thus, data, without theory into which it can fit, isn't meaningful. But theory, without data to check it, isn't meaningful, either. The first would be like entering a word into a dictionary but with no attached meaning—no links to other words already in the dictionary. And the second would be like adding a possible meaning to a dictionary, but for no attached word.

So what the troupe is really doing is this: it's building a dictionary, which it is forever rewriting by testing each tentatively defined word, thus re-learning the world, re-seeing the world. That is science.



THAT DICTIONARY-REWRITING DIDN'T END in 1812. On January 6th, 1912, an amateur geologist proposed that the continents had once fit together. Geologists jeered for decades. Continents drifting on solid rock? That was an unthought. What force was immense enough to move a continent? He had no answer. On December 18th of that same year, an amateur archaeologist claimed to have found the skull of an early human in Sussex. Paleontologists in Britain cheered for decades. Now they could boast that the earliest known human ancestor was British. But why didn't the skull fit with all the other fossils they had already found? He had no answer. (And no wonder, he had secretly made the skull out of separate parts.) Yet still, paleontology hailed the skull as Piltdown Man.

Why the difference in reactions? In 1912, geology's dictionary of the planet was still so incomplete that it couldn't yet let continents move; and paleontology's dictionary of species change was still so incomplete that politics could easily intrude. Lacking enough ways to test its guesses, neither field could tell a good guesser from a good faker. Geology then refused to believe in continental drift for 50 years. Meanwhile, paleontology refused to not believe in Piltdown Man for 41 years. Both fields didn't know what they didn't know.

Was science any different in 2012 than it was in 1912 (or 1812)? By then its dictionary was bigger and more detailed, but still it didn't know what it didn't know. Is science likely to be any different in 2112? By then it will know far more, and be even less unsure of what it thinks it knows now. But the more it knows, the more clearly will it know just how little it really does know, and how much more it doesn't yet know.

Its dictionary isn't a list of a mere few thousand words suitable for some human language and thus capable of fitting into human brains useful mainly for human conversation. It's a ideamap, potentially encompassing everything everywhere everywhen. In it, every defined word links, through its related testable guesses, to many other defined words in what has already grown into a huge tangled ball. It may be that the backstage links between the bits onstage may be too intricate for anyone to comprehend. The machinery backstage is surely not a tale told by an idiot; it may even be that everything links to everything else, in which case, no ideamap, no matter how detailed, will ever be complete. One day, a new kind of troupe, as yet unnamed but maybe to be called "metascientists," may even start analyzing the ideamap itself, seeking patterns in how the words link to each other, perhaps finding previously unnoticed metric spaces, and thus whole currently hidden geographies, in their linkage. There are more things in heaven and earth than are dreamt of in anyone's philosophy.

Scientists thus have to build their dictionary knowing that with it they're holding up an inherently broken mirror to nature. They have to try to somehow accept that everything in it is a guess, and will always be a guess, and that any guess, even a testable one, even if it has been tested for a long time, isn't, and can't be, "right" or "wrong." It can only be obviously wrong and less obviously wrong. When a guess passes a test, all that means for sure is that, so far, no one knows that it's wrong. They hope that, over time, by testing each guess more, and finding more links between it and other testable guesses, they might make their dictionary a little less wrong.

Science isn't just about seeking truth; it's also about accepting doubt.

Now, that's really not normal. Scientists ask questions of the cosmos that the cosmos always answers—but only with a mouth full of

marbles. What's it saying, exactly? So endless doubt pervades their work. That leads to lots of testing and linking, and lots and lots of quarreling. And, because it's a troupe effort, that quarreling has to happen in public. So they mostly bicker—and gossip, and show off to each other, but mostly they bicker.

Oh yes, they shrug a lot, too. That's because they have to accept that mostly all they know for sure is they don't know much for sure.

Science is one long argument. Of course, mere bickering isn't enough; and these days, pricey toys—like magnetic resonance imagers and cyclotrons and supercomputers—do matter. Plus, bickering isn't limited to science alone. But bickering inside science and math is special. Science and math students spend years learning how to bicker properly. That bickering can reduce many kinds of error, and that self-correctiveness gives it its special strength. That style doesn't work equally well in every field, but of all the ways of checking guesses that have yet been tried, it seems to be the least worst one. From it, others in medicine or agriculture or engineering or computing, then make the backstage do strange new things, creating brave new worlds.

So thanks, folks, for the antibiotics and vaccines and food from air and jets and electronics and self-driving cars, but what's that you say? Everyone descends from a single cell? And it's been billions of years since then? And catching a cold means the body is being rewritten? And skin can be reprogrammed to be almost anything else in the body? Oh, and energy comes in little bits? Energy and mass convert? Mass deforms space? Space and time relate? And most of the mass of the cosmos appears to be missing? And entangled particles communicate across galactic distance? But that can't be used to communicate? What?

These improv actors tend to be quite peculiar folk. They have a dictionary, and it works well, but for it to continue to work well they have to assume that it's wrong. They're always trying to rewrite it by looking for ways to ask the cosmos questions so simple that the cosmos can't avoid answering simply—then they try not to flinch or run away whenever those increasingly bizarre answers seem understandable enough to fit into their increasingly weird dictionary. That's how they try to accept the unacceptable.

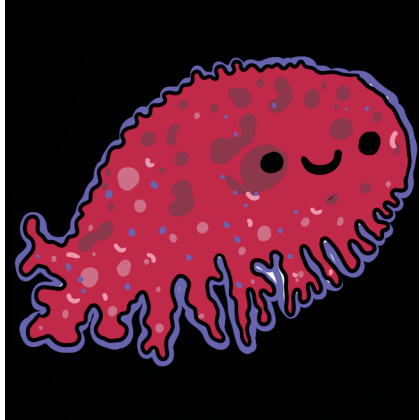
In sum, scientists must somehow accept that, no matter how intricate their dictionary, they don't know what the hell is going on—and likely will never know what the hell is going on. Meanwhile, many other groups consult their own dictionaries and from them know what the hell is going on, and that particular hell that they know is going on forces them to try to force all other groups into accepting that the hell that they know is going on is what is, in fact, going on.

**RAMBLINGS ON STAR TREK:
PLAGUES AND PANDEMICS**

NONFICTION

CHRIS AIRIAU AND RAJA THIAGARAJAN

Art by Lee Sargent



NOTE: This article contains spoilers for a TV series that stopped being produced more than half a century ago.

. . .

DISCLAIMER: Chris and Raja recorded their conversation on July 29, 2021, then freely edited this article to read better. This is **not** a transcript.

PLANET OF HATS is a webcomic by David Morgan-Mar that recaps of all *Star Trek: The Original Series* and *Star Trek: The Animated Series* episodes. Chris put links to each episode they discuss at the end of each section.

Introduction

Raja Thiagarajan: It says auto transcription enabled. Why would it lie to us?

Chris Airiau: Of course because it doesn't know what's going on in its life. It doesn't know what life is. It doesn't know anything about reality.

Raja: You've been talking to Kirk too much. Ok, we should start by introducing ourselves.

I'm Raja Thiagarajan, and I've been watching Star Trek for nearly 50 years.

I saw *Star Trek*, which most people now call *Star Trek: The Animated Series* (TAS), when it first came out on TV. A couple years later, I would walk home from school each day and watch reruns of the other series titled *Star Trek*, which most people now call *Star Trek: The Original Series* (TOS).

It's beyond the scope of this article, but when *Star Trek: The Next Generation* (TNG) started up, I fell upon it with glad cries. As of June 2021, I've seen every episode of every Star Trek TV series, from the original series to *Star Trek: Lower Decks*, and I look forward to watching new episodes (and series!) as they come out. I may be a fan.

Chris: A little bit.

So I'm Chris Airiau. I've been watching Star Trek for almost a year now.

[Raja and Chris laugh.]

Almost. I started watching TOS in late 2020, but not all the

episodes. I didn't want to watch all 90 episodes, or however many episodes it is...

Raja: Seventy-eight. You would know if you were a true fan!

[Both laugh.]

Chris: Well, I only wanted to watch the good episodes. So, I read a bunch of blogs about "essential" or "best" episodes, and I compiled a list and asked SFDG for feedback to nail it down. Fourteen episodes into my watchlist I thought, "This is great. I love this." And I decided to watch more. I knew Raja liked Star Trek a little bit, and he helped me avoid the worst of the worst.

I still saw some really bad ones. Not gonna lie.

[Both laugh.]

I finished TOS in April 2021, and I've seen the first four Star Trek films with Kirk, Spock and crew.

Raja: An amusing comment I heard from a member of the Science Fiction Discussion Group was, "We suffered through them all, why should he get a pass?"

I mean, just because *I* hate an episode doesn't mean it's a bad episode. And similarly, just because I love an episode doesn't mean it's a good episode. I think you could testify to that.

Chris: In both cases, yes. Though there's only a handful I thought were truly horrible, that I wish I had not watched.

Raja: Our original thought was to discuss the "essential" episodes of *Star Trek: The Original Series*. But then we thought of doing something more timely: Plagues and pandemics in Star Trek.

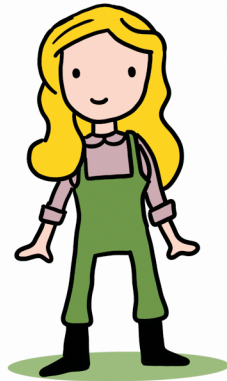
I was surprised to search online and find out that nobody had made a list of plagues and pandemics in Star Trek. So maybe we're the first.

Chris: I think one of the reasons why it's so hard to come up with a list of the plagues and pandemics is because there are so many border cases.

One which we could talk about first is actually the episode that convinced me to watch more TOS: "This Side of Paradise."

“This Side of Paradise”

Despite exposure to fatal Berthold radiation, the Federation colony on Omicron Ceti III appears to be thriving. Leila Kalomi, an old friend of Mr. Spock’s, shows the landing party strange flowers that seem to impose a state of pure bliss and perfect health on all exposed to its spores—even Spock.



Chris: Does this really count as a plague, if it’s a plant that’s trying to mind control everybody?

Raja: I mean it’s certainly not a story about microorganisms causing diseases. It’s more a metaphorical plague (like “Operation: Annihilate”, which we’ll talk about later), but it is pretty contagious.

Chris: Quarantine protocol in Federation space is super lax. They’re not afraid of anything. They’re just like “Let’s get space spores in our face.” The quarantine aspect is totally neglected, which causes the whole problem. It’s like, oh let’s just waltz on down and—“Ooh! Stop and smell the flowers!”

What I liked most in this episode was that Kirk doesn’t fall prey to the spore’s effect. He’s the last one because his paradise is the *Enterprise*. He wants to be on the *Enterprise*, running everything. And the spores have a really hard time taking him away from it. They have to spit in his face several times on the bridge of the *Enterprise* before he finally succumbs.

Raja: One cute thing is that you sent me a note saying, “This

episode was the first to make me think I might just watch 'em all.”
Then later you wrote—

Chris: “Seen a lot of stinkers. Won’t watch them all.”

[Both laugh.]

Raja: Though this isn’t strictly on the theme of plagues and pandemics, the story is interesting in that it uses the plague to let us know more about the hidden side of the characters.

Spock has repressed emotions all the time, and when he feels free to let his emotions rise, I think Leonard Nimoy does a terrific job. He does it several times in the series. We find out what Kirk wants, and discover that Kirk already has what he wants, so any change is bad for him. There’s also a recurrent theme in the series that when people get what they want, they become unproductive.

Getting back to the story, the colonists should all be dead because of Berthold radiation, but the plant’s spores protect them from the radiation. Everything they brought that’s not human died because it couldn’t symbiotically coexist with the plants. There’s a scene where they go to a barn, and it’s empty because—

Chris: All the animals are dead.

Raja: Yeah. The colony director—Sandoval—says they’ve been there all these years protected against radiation, and they basically have not achieved anything.

Chris: Too much blissing out to work. I wondered whether the dead animals have to do with the plant’s competition. Is the spore weeding out any competition with other caregivers?

Raja: Enslaving humans is so much fun it’s no good to enslave cows?

Chris: Or maybe the plant recognizes cows cannot help it propagate. Or they don’t react the same way, so the “disease” so to speak, only targets the humans.

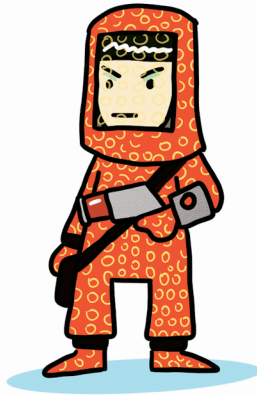
“This Side of Paradise” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0024.html>

Raja: OK, so “This Side of Paradise” was not the first episode you watched. The first episode you watched was...

“The Naked Time”

A strange, intoxicating infection, which lowers the crew’s emotional inhibitions, spreads throughout the Enterprise. As the madness spreads, the entire ship is endangered.



Chris: This is another Spock-loses-his-mind episode. It was the very first TOS episode I watched, and as I watched it, I was like “Oh god, this is not the good one to start with...”

[Both laugh.]

Raja: Of course my perspective is not going to be the same as yours, but I think “The Naked Time” is a very good episode for revealing certain things about the characters that get built upon later.

But I do love the sentence you used to begin the review of “The Naked Time” you sent to me.

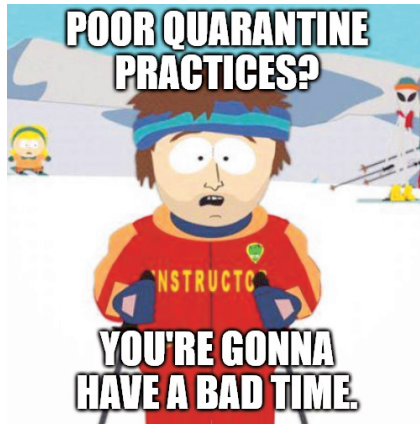
Chris: OK, when the episode starts, they’re in these environmental suits that you never see ever again in the entire series. This is serious business that they’re wearing these hazard suits. So, they’re in this weird frozen room, and this idiot redshirt takes off his gloves! I don’t even remember why—

Raja: He scratches his nose.

[Both laugh.]

Chris: And then he touches the weird frozen stuff, puts his glove

back on and doesn't say anything to anyone. I was watching during the pandemic, and wrote:



Created with Meme Generator on Imgflip.com

You'd think the Federation would improve their quarantine protocols after this, but don't they also do "The Naked Time" again in TNG?

Raja: [With deep disgust:] Oh yeah.

[Chris laughs.]

Raja: It was titled "The Naked Now". The major problem is having it as Episode Two of the series. As with your experience with TOS, revealing the deep dark secrets of the characters before we actually know the characters doesn't work well.

Chris: In "The Naked Time", even though it was my first episode, I was familiar with the characters. I knew who Spock was. I wasn't totally ignorant.

Raja: Out of curiosity, how did you know who Spock was?

Chris: Just pop culture. He's just popular. "Live long and prosper" [does hand sign]. Images of Spock on TV, on *The Simpsons*. Loads of people talk about him. I recognized and knew way more about Spock than Kirk. He's a really important popular culture figure.

And then, the first Star Trek stuff I ever saw was the JJ Abrams stuff.

[Raja grimaces.]

Chris: [Laughs.] Even before that train wreck, I knew a little about the way Vulcans are supposed to act. While watching “The Naked Time”, even for me it was shocking to see Spock fighting off tears. I was rooting for him trying to keep it together to save everybody.

Seeing everyone else just lose their mind was confusing. Like shirtless Sulu sword fighting people in the hallway. I would have appreciated their individual madneses more if I’d seen the episode third or fourth, at the soonest.

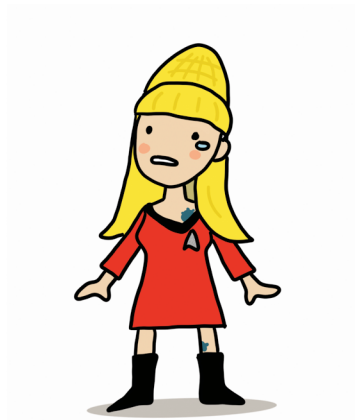
“The Naked Time” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0004.html>

Raja: OK, so what episode do you think we should talk about next?

“Miri”

After discovering what appears to be a duplicate of the planet Earth, Captain Kirk and his away team find a population ravaged by a strange disease, which only children appear to have survived.



Chris: “Miri” actually does have a legitimate plague. It also has probably one of the worst cold opens of the whole

series. Where they're like, "Oh my gosh. It's another Earth..." And then we don't talk about that ever again.

[Raja laughs.]

Raja: The planet is identical to Earth and—eh, so what?

Chris: This is the one where they're on the planet trying to create the vaccine....

Raja: They head down to the planet, and they're confused as to why everyone seems to be dead except for the children. And then the landing party starts getting sick with these gross-looking bluish spots.

The first Star Trek actor that I met at a convention was the late Grace Lee Whitney, who played Yeoman Rand, so I have a certain fondness for her.

There's a line of Yeoman Rand's in "Miri" that always made me cringe: "Back on the ship, I used to try to get you to look at my legs. Captain, look at my legs." And we see the blue splotch on her leg.

Chris: OK, I didn't remember that line. I was continually grossed out by Kirk exploiting his charisma on a preteen girl, the titular Miri. And it's an important plot point that Miri hasn't begun puberty. Kirk "acting" like he's hitting on a little girl—and that behavior being not only admissible but *admired*—ruined the episode for me, really.

This isn't just me complaining about late 1960s mores; the plague is linked to being an adult. The kids call the mutants "grups". Turns out the people on this planet created an anti-aging virus, but oops, it only works on children. All the grown-ups—*grups*—turn into violent blue-splotch mutants and die shortly after. So there's a load of kids who are over... 300 years old? When the pituitary gland activates that's what kills them.

"You're turning into a woman, which is why I'm hitting on you." Like ew, dude, no.

McCoy and Spock find the unfinished vaccine research notes and start again with their superior Federation technology. They have stuff beamed down to them, because they can't bring it back up to the *Enterprise*. And no additional staff.

Raja: Because for once they have a quarantine procedure in place.

Chris: But only when the shit hit the fan. They went down willy-

nilly like, “Whoo-hoo! Let’s do this! Different planet Earth and everything’s dead! Let’s see what’s going on!” And then almost died.

Raja: OK, what else is on the list?

Chris: You want to go to “The Omega Glory”?

Raja: No, [laughs] but I guess we will.

Chris: I mean, it’s like “Miri” and “The Omega Glory” are linked.

Raja: Yeah, all right. [Covers face in exasperation.]

[Chris laughs.]

“Miri” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0008.html>

“The Omega Glory”

Captain Kirk must battle a deadly virus and a treacherous fellow starship captain to stop a meaningless intertribal war.



Raja: My first exposure to “The Omega Glory” was [in a mocking voice] *back in the old days, when we barely had the wheel...*

Back then, TV was broadcast and there was no way to watch it if you missed it. You had to wait for it to be broadcast again. So one popular genre of books (whose popularity has probably plummeted) was novelizations of movies or TV shows.

James Blish did a bunch of collections adapting the original series

Star Trek episodes. Are they great literature? No. But I think Blish did a good, solid job, and as he went on, he became fond of the settings and the characters.

So my first introduction to “The Omega Glory” was the James Blish novelization of the episode. The collections typically held six to eight episodes each, and “The Omega Glory” was in *Star Trek 10*.

His versions of the episodes weren’t transcripts; he was usually given early versions of the scripts before the episodes were filmed. Sometimes there would be major differences between his version of the story and the final filmed version. For instance, the first aired episode of *Star Trek: The Original Series* was “The Man Trap”, the episode with the salt vampire. Blish’s version is titled “The Unreal McCoy”; I suspect that was an earlier, working title. And in the story McCoy is referred to as “Doc” throughout, rather than “Bones”.

When I read James Blish’s version of “The Omega Glory”, I thought it was kind of interesting. The ending was silly, but it was an interesting idea. So I hoped to see that episode someday during the reruns that were broadcast after I got home from school.

At the time, the GAF Corporation made stereoscopic viewers called View-Masters. You could put the viewer up to your face and—
[Chris mimes the View-Master goggles and clicking noise.]

Raja: Right. You would see these images in 3D with a greater or lesser degree of success. The episode that View-Master adapted for their reels was “The Omega Glory”, so I got to see a few stills from the episode and I thought, hmm, this looks kind of interesting.



Photo by Mick Haupt on Pexels.com

And then I finally saw “The Omega Glory” itself, and boy do I hate that episode. [Laughs.]

I mean, if I hadn’t had high expectations coming in, maybe I wouldn’t have hated it so much. But on the other hand, maybe I would. It has the same terrible ending as one of Isaac Asimov’s worst early novels.

Chris: So Kirk and Spock and McCoy go down to this planet where there’s a missing Admiral—or is he a captain?

Raja: He’s a captain. Captain Ronald Tracey. But let’s back up a little. Didn’t they find another starship in orbit—?

Chris: Everyone’s dead.

Raja: —and it’s not clear why. They go over to the ship, and they see all these empty uniforms with crystals spilling out of them.

Chris: You have this cold open and it looks cool. We’re going to have some major, major problems here. And then they go down and find the captain who has lived on the planet, because that’s the only place where you can be safe from...?

Raja: Whatever that plague is.

Chris: Yeah, whatever this infection is.

Tracey is living with a tribe. There are only two tribes left. The members of one tribe are vaguely Asian-looking, and the other tribe is basically Aryan.

[Raja and Chris laugh.]

Raja: And, as I recall, shirtless, but anyway—

Chris: Right, shirtless and they don't speak; they're barbarians. They act like animals, like they've lost their humanity, which is very similar to the last story in Jonathan Swift's *Gulliver's Travels* with the horse people, the Houyhnhnms. The story features the Yahoos, The story features the Yahoos, who are hairy, feral humans who can't talk.

Raja: OK, so what you're telling me is that "The Omega Glory" is not only bad, but it's ripped off from multiple sources.

Chris: [Laughs.] Yeah, perhaps. Who knows? Maybe it's a literary allusion...?

Raja: [Laughs.] OK.

Chris: And then it turns out this captain is crazy, because all these people are hundreds of years old, they age so slowly that they're functionally immortal. Again, much like "Miri". So Tracey is obsessed with finding the elixir for eternal life and making a fortune. And so Tracey starts torturing McCoy to work for him, which is always the sign of a bad *Star Trek* episode, when someone's getting tortured to add conflict.

Turns out these people are descendants of a biological war that devastated the planet. The virus is still everywhere, but so are the "immunizing agents". And so their species' adaptation protects them from turning into crystals and also makes them naturally long-lived. There is no elixir for Tracey.

And basically a glass of water from the planet could have cured the illness and saved the 400 lives Captain Tracey was responsible for. He could have saved everybody if they had done this one simple thing.

Raja: One weird trick.

Chris: One weird trick! Click here!

Raja: Well, we might as well spoil the rest of this episode. Hopefully there isn't anyone reading this who is afraid of being spoiled for a TV series that hasn't been produced for more than 50 years now.

It turns out the group that Tracey was with is the Kohms. You know: Communists!

And the Aryan folks are Yangs. You know: Yankees! And they have their sacred words, which turn out to be the United States Constitution.

Chris: It's so stupid.

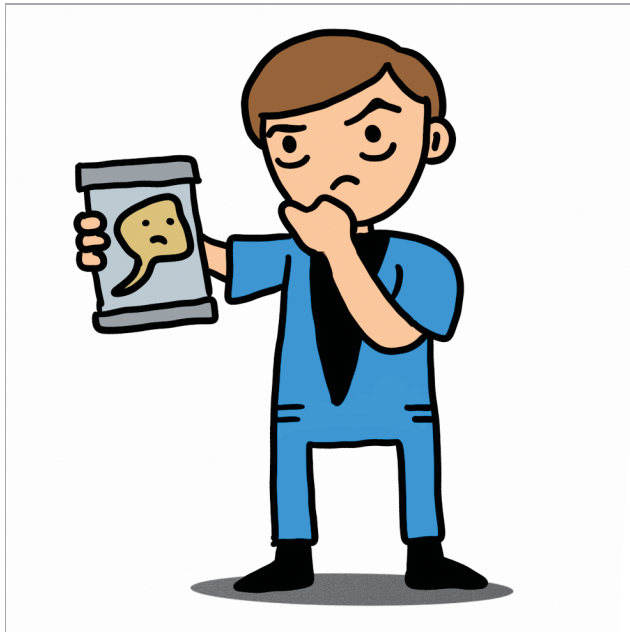
Raja: Yes, it's a terrible episode. Carl Sagan even wrote in *Broca's Brain* that it put him off *Star Trek*! But it does have a pandemic in it.

"The Omega Glory" on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0053.html>

"Operation: Annihilate!"

The Enterprise arrives at Deneva and discovers that the entire planet has been infested with large, amoeba-like aliens that have attacked and killed much of the human population.



Chris: It's "annihilate" not "annihilation"? I wrote Operation Annihilation because... it rhymes.

Raja: [Laughs] Well, we haven't all seen the episodes multiple times over the last 50 years.

"Operation: Annihilate!" doesn't have a plague or pandemic in the

sense of an infectious microorganism, but on the other hand the dangerous things are alive, and they act as if they're very contagious. In the episode, they worry about them spreading.

So, there is this Earth colony Deneva that has gone silent, and it's next in line of one of many systems affected by "planetary madness".

Chris: This planet is where Kirk's brother lives with his wife and kid—a sister-in-law and nephew he's never met. Then the *Enterprise* shows up and you think Kirk's going to meet his family, but no. The show kills them, mostly before the *Enterprise* arrives. Except the nephew. The nephew survives.

Then you learn that this whole colony has collapsed because of a pile of spilled glue that flies.

Raja: My friend Dave called it "the Planet of the Plastic Flying Vomit Creatures."

Chris: I joke, but the alien design can be forgiven, with the budget constraints and all. Despite the goofiness of the creature's appearance, they still make them come off as rather dangerous. I'd say it's a successful "Cool Alien" episode.

Raja: And again, we get to see a fair amount of drama. Would you say Spock is tortured or just put through the wringer?

Chris: Put through the wringer. He is attacked by one of these aliens. They're akin to the aliens in Heinlein's novel *The Puppet Masters*. The Flying Vomit Aliens can control people, and if someone resists, they cause nerve damage.

Raja: Or at least a strong feeling of pain.

Chris: Right. And Vulcans have neurological pain control as one of their superpowers. And he also has his special secret Vulcan eyelids in this one as well.



Raja: That I can buy. One annoying thing about science fiction in general, and Star Trek in particular, is summed up in fandom by the sentence, “It was raining on the planet Mongo.” Basically, the idea that every planet is very small and doesn’t vary in its climate, ecology, or culture.

Vulcan is supposed to be a planet of really harsh deserts and bright and harsh light from its central star, so I can see the need of two pairs of eyelids in order to shield their eyes under certain circumstances

Chris: Yes, because the “cure” for eliminating the aliens is a special kind of light. And so they bathe the whole planet in this light to kill the plague.

Raja: I prefer James Blish’s variant that he put in his collection *Star Trek 2*. The episode has a scene where somebody from Deneva colony escapes on a spacecraft and heads for their sun. And as he gets really close, he suddenly screams that he’s free, he’s free, and then he dies.

In Blish’s version, he said he flew near a sunspot, so it was the sunspot’s extreme magnetic field that killed the creature. In Blish’s

version, all they need is strong magnets to kill these things, which I think makes more sense.

Chris: Yeah, because I guess in the episode they're talking about the lumens?

Raja: The "tragedy" of the episode is dosing Spock with a large number of lumens before the test came through that said, "You know, you don't actually need visible light for this."

Chris: So it's not even the lumens, just some unspoken property of light, which you just have to accept as par for the course with Star Trek. I thought it was rather dumb that they couldn't wait five minutes for McCoy's test results. Definitely one of the borderline plague examples: Parasite propagation and a scientific cure. All in all, it's a good episode.

Raja: I agree; "Operation: Annihilate!" is a pretty good episode.

"Operation—Annihilate!" on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0029.html>

"The Deadly Years"

A landing party meets two people who are old in appearance but young in age. Bones concludes their bodily functions are aging about 30 years a day. The command crew of the Enterprise succumbs to the effects of rapid aging.



Chris: This is the one where they turn old, and there's something about fear?

Raja: The fear reaction blocks you from turning old. Chekov was so scared that he didn't get hit with the thing. Everybody else who went down on the planet is aging rapidly. The episode does have some interesting things to say about ageism.

Chris: I was surprised that in the late 1960s they were commenting on the loss of autonomy and patronization, both perceived and intentional. I thought it was uncharacteristically touching for TOS.

Raja: Though you can argue this doesn't really fit into plagues and pandemics because it wasn't contagious.

Chris: True, it's another one of those border examples of a sickness that they got.



Raja: All they know is that all of them got this condition except Chekov, and they are trying to figure out why. And it has one of my wife’s favorite lines from the Original Series:

“Blood sample, Chekov! Marrow sample, Chekov! Skin sample, Chekov!”

[Both laugh.]

[Clip on YouTube: <https://youtu.be/AIWifoJ5ZqU>]

Chris: Chekov has some good humorous lines that bring scenes together sometimes. Another funny thing about “The Deadly Years” is one of Kirk’s old flames. And she’s really into him because he’s old.

[Laughs.]

Raja: Kirk starts saying, “Well OK, are you interested in me out of pity or what?”

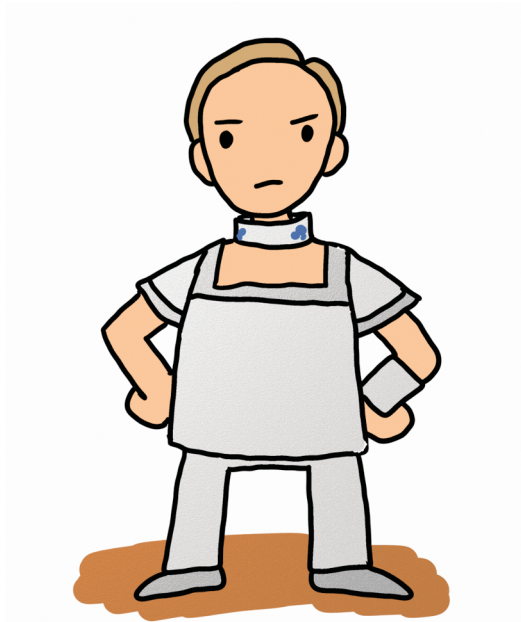
Chris: She wants to take care of him. Likes that gray hair, I guess, I dunno. It was rather mishandled.

“The Deadly Years” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0042.html>

“Wink of an Eye”

Invisible “time-accelerated” aliens take over the Enterprise and attempt to abduct the crew for use as “genetic stock”.



Chris: This is another tangentially not-really-plague episode, but it kind of is? The whole planet is cursed by this time freeze effect.

Raja: There’s something in the water that makes them all suddenly *speed up*. As I recall, they are a lot faster—they move faster than anyone can see. But they’re very vulnerable; if they get a scratch or anything then they basically die of old age.

Chris: Right. People who are more recently infected are weaker, and “cell damage” basically gives them “The Deadly Years” condition in fast forward. “Oh pity, you got a scratch. Time for you to die.”

This is Season Three, so this episode suffers from “Scantly Clad Women of the Week” Syndrome. When you have the woman supplicating to Kirk like, “It’s OK, we will take care of you. We need

your seed. You'll be like a king among men. You just have to live in this prison with us forever.”

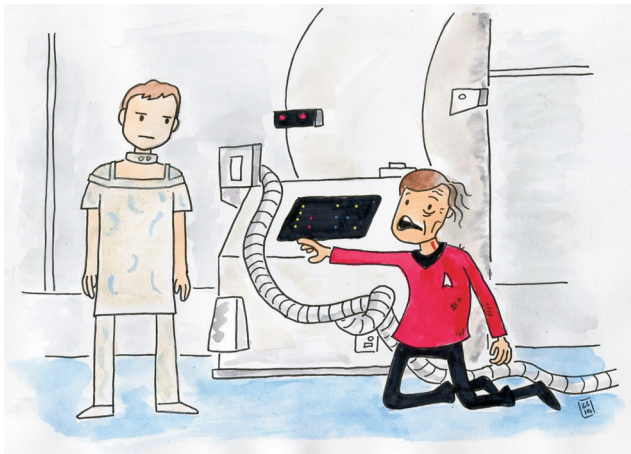
The red shirt goes against Starfleet in an instant after hearing this: “Oh, you're right, you're a seductive woman, and you want to give me everything I want in life. Sure, I will go against Starfleet and everything my life stands for! I will just totally say no to my former life and capture Captain Kirk. Sure, why not?” Come on man.

Raja: So, I will slightly object to one thing you're saying: that the third season is the season of Scantily Clad Women. There were scantily clad women from the very beginning!

Chris: Seemed so much more blatant in Season 3...

Anyway, it's really hard for me to buy this concept in “Wink of an Eye” because the Scalosians are not ever able to come up with a cure. They basically have infinite time to do this. It's impossible to understand what's going on behind their “catch men for procreation” trap, which makes it feel more like some sort of gross male fantasy than a real science fiction idea.

And then Spock and McCoy and make a cure in 15 minutes. Literally 15 minutes! Kirk is not like hanging out for a year of Scalosian time waiting for them to figure it out.



Raja: Well, and there's the whole issue of, OK, they found this

cure, but it doesn't apply to the Scalosians? Is there some rationale for why the Scalosians are still stuck?

Chris: It's not addressed at all, and it's just ridiculous. The whole premise is undercooked.

My thought was: Why wouldn't Starfleet create a Scalosian acceleration potion and antidote for battle situations? If anyone attacks them, everyone just gets out their little drop and—Boop!—goes into super-super fast overtime! They could launch boarding actions and beat up the aliens and take over their ship and space them all. And then they can take the antidote, and boom, now they have a new ship!

They didn't think about anything with this episode. It could have been fixed by like one line, like, "Oh, Kirk it's crazy that you survived the antidote!"

I don't know, am I going too far?

Raja: Meh, there are no right or wrong answers.

Chris: It's one of those lost details that could make for a good episode in itself. Exploring Starfleet's abuse of the Scalosian acceleration sickness.

"Wink of an Eye" on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0068.html>

"Day of the Dove"

An alien energy-based life form that feeds on negative emotions (such as fear, anger, hatred) drives the crew of the Enterprise into brutal conflict with the Klingons.



RAJA: So again, not any sort of plague in a biological space or a microorganism sense or anything like that.

Chris: A space entity feeds off anger, and so foments anger between antagonistic forces and traps them into fighting for eternity. Its ability to antagonize people and push them towards anger makes me think of this like a symptom of illness...

Raja: In “The Day of the Dove”, the crew and Klingons weren’t thinking clearly at all because the creature was affecting them even before they reach the planet. They thought they got a distress call from some Federation colony, but there never was a Federation colony.

Chris: And something similar happens to the Klingons, who end up prisoners on the *Enterprise*. But Kirk tricks them onto the *Enterprise*?

Raja: And the alien makes the two groups even more hostile towards each other.

Chris: And then it helps Kang and the others escape by transforming all the phasers and knick knacks—like candlesticks and decorations—into swords. For real. So they start sword fighting for

control of the *Enterprise*, which is silly. During this whole combat for Engineering, Spock and the others figure out their memories are being changed and their wounds healed by this entity on board, which they see floating in Engineering at the end.

The end is a great moment for the whole series. Kirk is pleading to Kang with the help of the Klingon science officer Mara—who is also Kang’s wife. Telling him they’re prisoners to the alien, and if they keep fighting they’ll lose their lives to meaningless violence. They convince Kang to work together. So they throw down their swords and just start laughing at the creature until it gets pissed and leaves.

On personal level, this resolution is funny because it’s similar to the ending of *Ghostbusters 2*. Viggo the Carpathian feeds on the anger of New York City—a hilarious yet underused joke in that film—and then in the end the Ghostbusters defeat Viggo with good vibes and everyone singing New Years songs together. Viggo dies because everyone’s happy, and it’s the same for this space entity.

So *Ghostbusters 2* ripped off *Star Trek*.

Raja: There you go.

I’ve always been a fan of “The Day of the Dove” because it was the first really good look we got at Klingon culture in Star Trek. One of my favorite lines from the original series comes from this episode; in the original Klingon, it would be

qaStaHvIS wa’ ram loSSaD Hugh SIjlaH qetbogh loD

In English, that translates to, “Four thousand throats can be cut in one night by running man.”

Chris: That’s very Trojan.

I guess if anything this episode is under the limit of the plague borderline. This one’s a little bit below the line. But hey, in this episode, laughter is the best medicine!

Raja: Well, to be fair, you’ve just reminded me of something that I’d forgotten. Do you remember the episode “Requiem for Methuselah”? In the beginning, they actually have a plague of Rigelian fever on the *Enterprise* and they’re worried about being wiped out.

They have some certain number of hours before the plague will be unstoppable, and they'll all die.

Chris: Oh yeah, and they need the, the...

Raja: The mineral rycetalyn. And another example, I think it's "Galileo Seven." The *Enterprise* was transporting medicine to stop a plague on a planet, and the High Commissioner wants them to basically stop doing science get back on track.

Chris: And wasn't that an agricultural plague. Like it's killing the metawheat that will cause planetary famine?

Raja: You must be mixing that up...

"Day of the Dove" on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0064.html>

"The Trouble with Tribbles" (and "More Tribbles, More Troubles")

Tribbles—purring, fluffy, and fertile creatures—disrupt the exploitation of a disputed planet between the Klingons and Federation.



Chris: Maybe with the tribbles episode? There's the agricultural minister or whatever?

Raja: Well, definitely the tribbles episode has the Federation undersecretary for agricultural affairs. I believe the "metawheat" you're talking about is quadrotriticale, a wheat and rye hybrid.

Chris: Yeah, that's right. The tribbles could be considered a kind of plague.

Raja: That's true. If we're going to count the Flying Plastic Vomit Creatures, we should probably also count the tribbles.

Chris: One reason it's easy to overlook the tribbles is because it's a very goofy episode.

At the end with the tribbles, Scotty's like, "Oh, I just beamed this disastrous invasive species to the Klingons! Har-har-har! We committed a war crime! Har-har-har! Biological weapons! This is so funny!" Guys... Like, whoa...

Any thoughts about the tribbles as a plague?

Raja: One of my favorite adjectives is "presentist". The idea of tribbles as an invasive species is a very presentist attitude. In the mid-1960s, thinking about ecology was not as widespread. One of the reasons *Dune* took off so much in written science fiction was that it was one of the first SF books to take ecology seriously. "The Trouble with Tribbles" came out two years after *Dune*.

Ecology was not something people were thinking about as much at the time. Of course now, as you say, clearly this is an invasive species that that will cause all sorts of problems. To be fair, that's also pretty much an explicitly stated theme in the episode:

"Too much of anything, Lieutenant, even love, isn't necessarily a good thing."

Chris: And then the tribbles reappear in TAS, and they get big? I forget how it happened.

Raja: In "More Tribbles, More Troubles" they become large, and they have the glommer, which is the artificially engineered, Klingon-made tribble predator. Cyrano Jones stole the prototype, and the Klingons are almost willing to go to war to get the prototype back so that they will be able to control this invasive species that the Federation has attacked them with.

Chris: Yes, *attacked them with*. The *Enterprise* really did attack them with a biological weapon. “Har-har-har! So funny! Let’s laugh about our war crimes!”

[Both laugh.]

“The Trouble with Tribbles” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0045.html>

“More Tribbles, More Troubles” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0088.html>

“Albatross”

Doctor McCoy is arrested for allegedly causing a deadly plague which once ravaged the planet Dramia.

Raja: “Albatross” was an episode in *Star Trek: The Animated Series* that really did have a plague—an alien plague—that breaks out on the *Enterprise*. I think it’s the most plague-y episode of the Animated Series.

Chris: What do you like about the episode?

Raja: It has a nice bit of characterization for McCoy. McCoy headed a mass vaccination project nineteen years earlier, and he wonders whether his younger self could have made a mistake that somehow led to the plague.

Chris: Even “Albatross” is a false plague, though, because it’s an illness caused by a space hazard. In its defense, they do quarantine the *Enterprise*, but man, TAS is so painful sometimes...

Raja: Well, I seem to be fonder of the Animated Series than most people. Anything I say about how great something from TAS is, you might want to take with a grain of salt.

“Albatross” on *Planet of Hats*:

<https://www.mezzacotta.net/planetofhats/episodes/0103.html>

“Blood and Fire”

Raja: There is one other *Star Trek* story I want to mention that was written by David Gerrold. In the 1980s, there was a lot of concern in the real world about the AIDS pandemic. People were afraid of donating blood, so he actually wrote an episode for *Star Trek: The Next Generation* about it. Essentially, he was told, “Yeah we’ll make the episode,” and then it was, “No, no. We can’t make the episode. We’re never going to make this episode.” In part, because it’s an episode about AIDS, they had to address something about homosexuality, and the people making *Star Trek* weren’t ready to go there at the time.

Years later, some fans put together various fan films, and some of them are really quite good. One of the things *Star Trek: New Voyages* did was a two-part version of Gerrold’s AIDS story, “Blood and Fire,” about a really extreme contagious plague. It was actually directed by David Gerrold.

Star Trek: New Voyages “Blood and Fire” is available online at https://www.stnv.de/en/4x04-5_blood_and_fire.php

I recommend the “Movie Version”, which joins the two parts into a single movie.

Conclusion

Raja: Do you have any closing thoughts or anything else you want to talk about?

Chris: One thing that’s really interesting about TOS is the lack of a very clear pandemic or viral infection kinds of episodes. There’s a lot of these borderline cases. A few have actual diseases in them, but they’re always really easily treatable. I think it says a lot about the Original Series, and how the writers considered the human body to be a very easily solvable problem.

I feel like even in TNG a lot more serious health issues reoccur, and what—it’s supposed to take place about 200 years later?

Raja: 95 years, more or less.

Chris: See, I know nothing about this series chronology. [Laughs.]

So, not even 100 years later, and it seems like they're having a harder time with the human body than they do in TOS, where McCoy's is like, "Let me take these three tools and fix your body permanently forever."

To me, this displays both an optimism and ignorance of biology. Genetics isn't a simple key that can easily unlock a vault of cures. As is natural, the enormous progress biological research has made since the late 1960s has revealed to the public at large (at least those who take an interest in knowing) how immensely complex life is. Now, I haven't seen *Star Trek: Discovery*, but I do wonder how this series and its sister show *Strange New Worlds* will explore medical issues post-COVID-19 pandemic.

Video conversation

We've posted our original conversation on YouTube. If you enjoyed reading this so much you feel inclined to watch one full hour of us bumbling through many digressions centered on plagues and pandemics in TOS & TAS, well, be our guest! (Don't say we didn't warn you!)

<https://www.youtube.com/watch?v=RATpt-FsLoI>

REVIEW OF THE NEVERS

NONFICTION

RAJA THIAGARAJAN



YOU SHOULDN'T READ the Wikipedia page for *The Nevers*—it's full of spoilers—but I am going to quote the opening sentence. To wit, "*The Nevers* is an American science fiction drama television series created by Joss Whedon for HBO."

I would say that it's one of the three best genre works to appear on HBO, along with the 2019 *Watchmen* and *The Leftovers* (2014-2017). Of course, a mass audience would disagree with me, putting *Game of Thrones* (2011-2019) above those. Or perhaps they wouldn't, for the same reason I wouldn't: The final season of *Game of Thrones* (April 14-May 19, 2019) was supremely unsatisfying. (Writer David Gerrold says that your ending, or what you leave your audience with, is the most important part of your writing, and I'd say this example bears him out.)



THE FIRST SEASON of *The Nevers* is planned to consist of 12 episodes, split into two half-seasons of six episodes each. As of this writing (August 2, 2021), I've seen the first half-season twice and am eagerly awaiting the second half-season. Word on the Wikipedia says I'll be waiting until 2022.

I first watched *The Nevers* with my wife more or less as it came out. I watched it a second time with the SFDG; I recommended that we try it for our weekly Video Party, and it was quite popular. (We finished all six episodes.) My favorite episodes are the fourth and the sixth, though I also love the last scene in the first episode.

Per Wikipedia, the original plan was that "Joss Whedon would serve as a writer, director, executive producer and showrunner for the series." But

On November 25, 2020, Whedon announced that he was stepping down from the series citing various reasons for his decision in "this year of unprecedented challenges." In a released statement he explained that the taxing nature of working on such a project during the global coronavirus pandemic had taken a toll on his energy levels, and confirmed rumors that he would be officially exiting the series.

One more Wikipedia quote:

On January 28, 2021, British screenwriter Philippa Goslett was announced as the new showrunner for *The Nevers*, taking over two months after the departure of Joss Whedon. Goslett has developed shows for other networks, such as FX, BBC and Channel 4, but this marks her first time as a showrunner.

I'm a fan of Joss Whedon's work, though I acknowledge that in 2020 he gained a reputation for creating a hostile workplace. (See, for instance, https://en.wikipedia.org/wiki/Joss_Whedon#Accusations_of_workplace_harassment).

A number of people (some of them in the SFDG) say that people

are fans of Whedon because he is good at writing dialogue. Similar statements are made about Quentin Tarantino, and I agree both are good at writing dialogue, but I think the “he writes good dialogue” praise sells them short.



THERE ARE three kinds of writing I like:

- Fix-ups
- Writing that’s surprising in the moment but feels inevitable afterwards.
- Writing where the story you think is being told is not (quite) the story that’s being told, and when you look back, you see the signs that you ignored at the time.

The Nevers exhibits all three.

Episode six, “True”, is told as a fix-up in four unequal parts. I don’t want to say anything more for fear of spoilers, except that one member of the SFDG Video Party said he had to make sure he was watching the correct video. ;-)

I’d say that writing that surprises in the moment but feels inevitable afterwards is a trademark of Whedon’s work (and the work of his writing teams), and there are many examples in *The Nevers*.

My favorite example of the story being told being not quite the story that you think it is is one of the books on my Top 12. I don’t want to say more for fear of spoilers. Similarly, I don’t want to say too much about how *The Nevers* does something similar... except to say that there’s a twist in episode four that is revealed in episode five, and there’s a revelation in episode six that casts the whole first half-season in a different light. Indeed, rewatching the half-season in the light of episode six is quite entertaining; all the clues I’d missed stand out quite clearly.



IF I HAVE CONVINCED you to try *The Nevers*, let me mention a few more things.

The first is that this is a TV-MA (TV Mature) series on HBO. You should expect a level of sex and violence that would correspond to an R-rated movie, and not all the sex and violence seems strictly necessary to the plot.

The second thing to keep in mind that this is a modern television series, and a Joss Whedon television series. The latter means that the series leans heavily into the strengths (and weaknesses) of television as a medium.

The unique strength of television as a medium is that it allows storytellers to immerse the audience in a large group of characters at the beginning and slowly introduce them, and gradually reveal “who they are”, over the course of several episodes. That certainly happens with *The Nevers*, which has many characters who play significant roles, but whose names (and natures) are not revealed at once. As a member of the audience (especially of a Whedon show), you are expected to pay attention, and “push through” a certain amount of confusion and discomfort.

On my first watching, I found the first episode very frustrating and was almost ready to give up... until the closing scene about 58 minutes into the episode caused me to realize what I was watching. This gave me a framework to place it all in. This scene was particularly interesting to me because it makes sense to me as a genre fan in the 21st century in a way that it wouldn't make sense to the characters in 19th-century London.

The third thing I want to mention is that on my first viewing, episode two was also frustrating; a lot happens, and several character behaviors seem unmotivated. But I recommend that you “push through”; I believe the rewards are well worth it.

Here's looking forward to the second half-season!

ANOTHER REVIEW OF THE NEVERS

NONFICTION

CHRIS AIRIAU



IN 1896 LONDON, random people develop superpowers. These powers are just as often curses as they are beneficial. The main protagonist—Amalia True—runs an orphanage which houses “the Touched”, helps them deal with and use their powers for good, and protects them from unknown assailants.

Yes, *The Nevers* is steampunk X-Men. The parallel is undeniable.

There's a "psycho" Touched who leads a group of terrorist Touched. There's a "Senator Kelley"-like Lord (read: a classist, racist white patriarch) who wants to preserve the status quo against the Touched. Even the woman who owns the orphanage for the Touched¹—an unTouched aristocratic spinster named Lavinia Bidlow—is in a wheelchair.

Although the set-up and conflicts are a steampunkified copy of X-Men² (and I'm sure others might point out X-Men is a copy of something else I'm not aware of³), by the end of the first episode, *The Nevers* delivers on the concept in an exciting and unexpected way.

The first, most evident difference is that these powers affect those with the least social power in turn-of-the-century London. Nearly all of the Touched are women. People of color, lower classes, and immigrants are more often Touched than white, affluent Londoners. (And based on a few central characters, I think neurodivergent people are also more affected, but that's not confirmed.) One of the big mysteries of the series is why this equalization of power occurs.

Superpower fiction is well-trodden territory for most audiences by now. The struggles and conflicts of the Touched, a.k.a. Those With New and Strange Powers, won't surprise comic book or SF lit fans. They argue over how to use the powers, how to present their powers to the fearful public, how to manage the different factions. In the six episodes released so far, *The Nevers* hasn't pushed any boundaries.

The show's main thematic goal seems to be delivering prescient statements about discrimination and oppression. In that facet, it's just television. *The Nevers* doesn't say anything new or bold. While that in itself deserves criticism, I am glad for the showrunners' effort in doing so while telling a compelling (though complicated) story with competent and (mostly) likable characters.

The story is... not hard to follow, but gee-whiz, it delivers so many plot points in a mere six hours of television that I felt like it was a whole 12-episode season run. If you've read Raja's review, I will corroborate: It pays to pay attention. To writers' credit, I never felt lost with all the wild stuff going on. And it does get weird.

This show's greatest strength is its ensemble cast. Joss Whedon's thing is to bring together a collection of misfits from all walks of life,

and throw them into a pressure cooker to see what comes out. The performances are top-caliber television acting, only disrupted by one actor who—in my opinion—overdoes their bit (which is a shame because they're an otherwise compelling character). Overall, it's the character interaction, tension and exploration makes this show come to life.

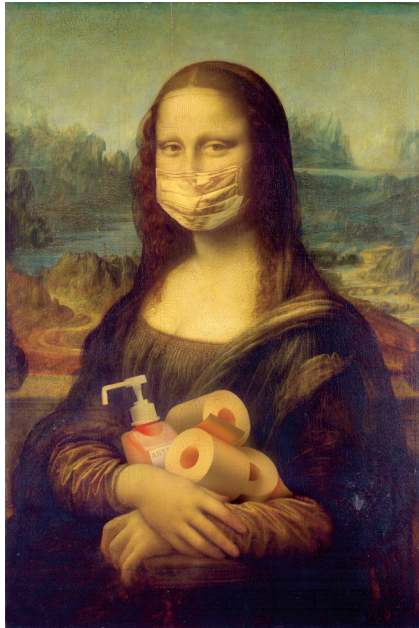
Would I recommend it? If the show concept intrigues you, I'd say dive right in. I have my doubts about potential payoff of some narrative elements—as I always do with TV series—but we'll just have to wait and see.

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1. I overuse this term, the Touched, on purpose because it begs the question of why this show is called *The Nevers*. From what I've read, the title was part of Whedon's pitch, as in, "these people should Never have existed, and like, they own that title and call themselves the Nevers, fuck yeah!" (not a real quote). This does fit into the anti-supremacist, anti-patriarchy themes of the show, except they never say the Nevers ever in the show.
 2. I fear this may be saying too much as it is, and an example would definitely be a spoiler, but I'd also argue *The Nevers* draws inspiration from *Firefly* characters.
 3. **Editor's Note:** In prose SF, there's *Children of the Atom* by Wilmar Shiras, made from stories published between 1948 and 1953. In comics, there's DC's *Doom Patrol* (dated June 1963). *The X-Men #1* is dated September 1963.

**SFDG COVID-19 QUESTIONNAIRE
AND RESPONSES**

SURVEY RESULTS

EDITED BY CHRIS AIRIAU



FOR THIS PANDEMICS Special issue of *Loop Garou*, we created an online survey to ask members of our Science Fiction Discussion Group

(SFDG) and friends and family how they felt about living through an SF novel. Thirteen people were kind enough to share their memories and thoughts about the COVID-19 pandemic.

What do you remember about the unfolding moments of COVID-19? How serious did you think this virus would be?

Sparky Malarky: Pretty serious. I was very scared.

Jason Thiagarajan: I remember constantly refreshing the live covid map to see any updates.

Dedaimia Whitney: My alarm signals started going off very early, maybe November of 2019. There was just something about what they were saying about Wuhan that made me think it might be a lot more serious than anybody was saying right then.

Vance Reese: I recall listening to German news podcasts in order to learn the language, and I loved the way that “Koronavirus” rolled off the tongue. I didn’t imagine that it would hop the ocean, but I hadn’t counted on the ineptitude of our nation’s leadership at the time. From stories I had heard on the news, I figured it would be something to contend with, but I had no idea how we would have to cope.

Logan Brown: I will confess I had thought it would pass like all the other “pandemic” viruses I’d seen hyped up—particularly swine flu.

Karen A. Wyle: I remember hearing the first mentions of it and not expecting it to be earthshaking. I remember when I realized COVID-19 would have broad impact, including on my own cherished plan to visit my younger daughter in Boston for her birthday.

Chris Airiau: The gravity of its propagation didn’t register. I even booked flights from France to the US for May 2020 (something I mentioned to SFDG in my February 27 review of *This Is How You Lose the Time War*).

Ignacio: I remember a parents meeting at my daughter’s school. One of the parents is a doctor and she had given a talk to the kids about preventive hygiene the week before, when “the virus seemed so far away”. At that point a quarantine like the one we had in 2009 seemed inevitable.

Alek: What I remember about its unfolding was how quickly

international air travel was restricted or completely stopped. It was both scary and impressive how quickly there was world-wide reaction.

Raja Thiagarajan: So here is my recollection, eighteen months later. It's probably unconsciously embroidered by my feelings **now**.

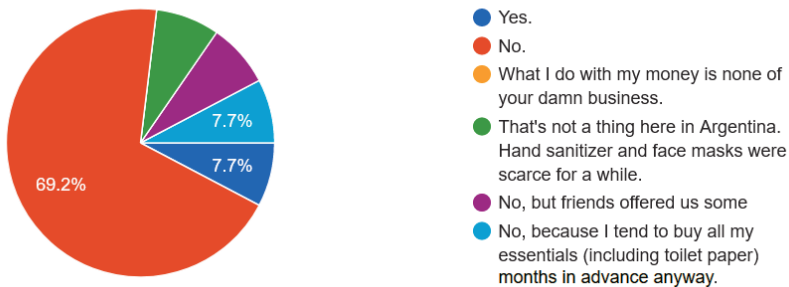
Some SFDG folks who are more plugged in to things biological and pandemical were a little concerned about the reports out of China. Several of us were scheduled to attend a wedding on Leap Day (February 29, 2020) and there was a little joking about “do we want to be in close quarters with lots of people traveling from all over the world?” In the event, we **did** go to the wedding, and had a grand old time seeing—and hugging!—friends we hadn't seen for years, from all over the world. I think one of our friends from California even made a joke about diseases coming in from China.

A few weeks later, I think I was uncertain, but did not think it would be that serious since I hadn't had any experience with pandemics.

Gregory: When the stories about COVID were being passed around in science circles, it was a serious business because it's a respiratory disease. I attended a wedding because it was for a very good friend, but I was concerned that some of the attendees might end up dying.

Did you hoard toilet paper?

13 reponses



What experiences did you have during your trips to purchase essentials?

Vance Reese: People for the most part being careful in the city, and careless in the country, about social distancing and masking.

Ignacio: Eerie may be the best word to describe it. Silent people looking wearily at the others.

Evan Wineland: Realizing no one could see you smile behind the mask. It made everyone feel much colder and less friendly, even if that wasn't the case.

Logan Brown: I got a sneak peek into what life is like for much of the world. Food is available, yes, and toiletries, cleaners, and miscellaneous other sundries, but I suddenly couldn't have exactly what I wanted when I wanted it. Basics like pasta and bread were completely picked clean, and I had to make do with whatever I could get. This was hardly true hardship, but I think it was the reality of shortage itself that was scary.

Gregory: I thought people were hilariously stupid. It was an amusing experience. The very first time was the night after an SFDG meeting. (March 12, 2020.) We went to Kroger to get some groceries, and it was incredibly crowded. It took forever, and then it took forever to check out. Nobody was wearing masks yet. Shopping carts were full of all sorts of things.

Raja Thiagarajan: There was a fair amount of initial confusion. I remember long lines pre-masking and not-terribly-rigorous social distancing.

Chris Airiau: My first trip to Monoprix was to buy, first and foremost, baby formula and diapers, as well as enough staples to last us a couple of weeks. I had seen photos on the internet of the baby section in supermarket shelves wiped clean, absence of pasta and rice-toilet paper, of course—and overflowing shopping carts.

In Poitiers, I waited in a line outside to limit the number of shoppers. Already, the other shops in the mall were closed, including Monoprix's clothing section. When I was allowed in, no one was hoarding any product, people kept their distance, and there was plenty

of baby formula, diapers, even TP. At that moment, I was very happy to be in France.

Thiagi: Shops ran out of essentials.

Sparky Malarky: Everyone was out of toilet paper. Which I TOTALLY DID NOT HOARD! But that's because I normally buy it in bulk and I had lots when the pandemic started.

Honestly, everything went fine. I tried to stock up on essentials. Eventually I switched entirely to online ordering and delivery services.

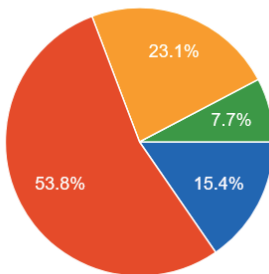
Karen A. Wyle: Before I started using grocery pickup exclusively (which I'd already been using some of the time due to an arthritic hip), I noticed bare shelves in many parts of the store.

Dedaimia Whitney: We very quickly found ways to shop online. Those habits are still with us, for the most part.

Alek: My main problem was to get groceries online and I remember refreshing web pages to get a slot and counting days until I ran out and would need to actually walk out...

Did you believe the pandemic would be over before Fall 2020?

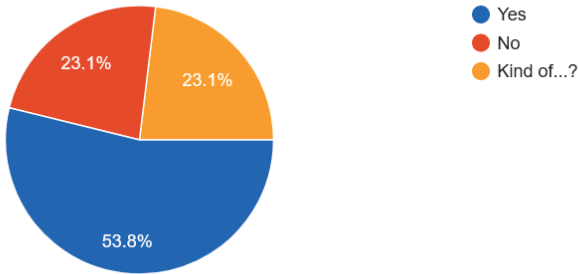
13 reponses



- Yes
- No
- Maybe
- No, the numbers in other countries kept climbing and we had no reason to believe it would be different in Argentina. Because of the severe lockdown it took longer to get bad here.

Did you go into quarantine?

13 reponses



Please describe your local quarantine measures.

Jason Thiagarajan: Not leaving the house.

Vance Reese: I never needed to be in quarantine for being exposed to the virus. So far.

Raja Thiagarajan: People were supposed to avoid contact with each other for a week.

Alek: Importance of proper hand-washing greatly increased. In the early stages it was easy to become very paranoid about anything brought in such as packages...

Karen A. Wyle: We didn't go to restaurants or meetings. We didn't see friends in person. We used grocery pickup and kept our car windows closed.

Ignacio: We stayed at home, going out maybe once a week.

Gregory: I preferred to use my own stricter measures: wearing facial coverings and not touching my face between the time I left my house and came back and washed my hands thoroughly.

Sparky Malarky: At first I was terrified to leave the house, but life goes on. My daughter works for IU Health, not in a patient-facing capacity but she daily sees how many hospital beds are full. She told me, at one point, to stop shopping. That's when I started using delivery services.

Dedaimia Whitney: The first “measure” was to read the news obsessively and tried to match our behaviors to the recommendations of the medical community. We started off washing groceries, quarantining mail, disinfecting door knobs, etc. We even bought a UV wand; it now resides in my dead electronics cabinet. When the experts started saying that surfaces weren’t the biggest problem, we eased off on the disinfecting.

Basically, I went nowhere. My husband went shopping at big box stores about once a week, which caused some conflict at home. I made a lot of face masks (600+) which were distributed to friends and local restaurants, food stores, and the fire department. We wore disposable gloves for a while.

Chris Airiau: In France, if you went outside, you had to have a “Justified Outing Certificate”. This was an official form you had to fill out online for your phone, print and fill out by hand, or write out entirely by hand following the format. On the form, you had your name, address, and your justification for being outside your home.

Among the justifications were: seeing the doctor, taking care of a family member, administrative or court appointment, buying essentials, work commute.

There was also an option for “Brief outing for a maximum limit of one hour within one kilometer from your home for individual exercise, taking a pet out, or walks. Only those living within the same household may be together during this outing.”

Evan Wineland: I basically moved in with the woman I’d started dating less than a month before. We only went out to get groceries and go for walks.

Logan Brown: Like most of the world I bunkered up with my significant other and avoided everybody else. I will admit, however, to allowing family into my house. I found that everybody was suffering too much for me to turn them away. It was irresponsible, but at the time I didn’t feel that it was really a choice. Everybody’s sanity was teetering on the edge of a knife.

How would you describe your quarantine experience?

Chris Airiau: Starting mid-March, every night at 8pm nearly everyone on our street would open their windows and applaud. This baffled us at first, but it was a ritual that started to thank the medical and essential workers for their efforts. This continued until the first quarantine ended on May 11th, 2020.

Dedaimia Whitney: The conflict over how much to go out was the hardest part. Staying home didn't bother me much—I got a lot of quilting done.

We drove to Texas to meet our newly born grandson in October of 2020. We camped in the car, ate at fast food outdoor tables (or in the car), and made it there and back without disease. The worst part of that trip was that the front axle of the car broke about 100 miles from home. We waited in the pouring rain for 90 minutes for AAA to come pick us up, and when the truck arrived, neither of the men in it had masks. I gave them some of ours, but that 25 minutes in the back of the tow truck was the most nerve-racking time of the whole pandemic.

Alek: The few days when I developed flu-like symptoms were some of the scariest days in my life.

Evan Wineland: It had a significant impact on my mental health. I struggled to focus on the job and volunteer activities I truly cared about.

Sparky Malarky: Lonely. I felt like I was bargaining. I kept telling myself "I'll be okay as long as we can still have Christmas." We couldn't have Christmas. Then I was telling myself "I'll be okay as long as this doesn't last more than a year. I can do a year."

I couldn't concentrate. I couldn't enjoy things I used to enjoy.

Gregory: I went to school exactly once; to pick up my mail without interacting with anyone.

Karen A. Wyle: Less disruptive than for most people, since my husband was able to work from home and I already did.

Ignacio: Comfy staycation. I was never a big fan of social meetings, and had the fortune of being with the people I cared about the most.

Logan Brown: Overall, I think the thing that most shocked me about quarantine - both for myself and for many people I know - was how little changed. I already work from home, already rarely go out or see friends, and already experience an almost-constant ambient sense of doom. I honestly feel like quarantine was just the next logical step for American life - increasingly alienated, impoverished, and mediated. The slowness with which people are re-acclimating to public life (as best illustrated by the inability of people to simply exist on planes together after quarantine) is, I think, powerful evidence of this tendency.

Jason Thiagarajan: I've forgotten all of it.

**Did your workplace shut down and send its employees home?
What was your experience like?**

Raja Thiagarajan: Yes. Things were kind of weird; we were told to go home and stay home until we heard otherwise. I don't think anyone was expecting it to last as long as it did.

Evan Wineland: I remember the sales team at the office being called into the manager's office and told "Get your shit and don't come back on Monday. We'll tell you when you can come back into the building. Take everything you need. Keyboards, monitors, mice, catalogs...everything. We expect it to be two weeks, but we'll see what happens."

The customer service and quotes departments, along with the delivery and warehouse staff were still there. But those two parts of the building were isolated from one another.

I missed my colleagues. Our office has a real family feel. We care about each other, both succeeding together at work and as people outside of it.

Alek: Yes and surprisingly fast. One unintended victim was my green plant in my office. It simply had no chance to survive with total ban on visiting our workplace for months...

Dedaimia Whitney: We're retired, but my daughter was laid off and my granddaughter was sent home from college. It was scary and disruptive.

Thiagi: We design training for different companies and deliver it onsite. We stopped receiving invitations to conduct onsite training. All in-person training sessions were cancelled.

Karen A. Wyle: My husband's workplace, Crane Naval Surface Warfare Center, largely switched to remote work. It had an up side for us, in that my husband was due to retire at the end of the year, and our time at home together reassured me (he wasn't worried) that we wouldn't get on each other's nerves even if spending all day in the same house and even the same room.

Sparky Malarky: Retired. However, I had started a hobby that I was passionate about and that closed down. I was devastated.

Vance Reese: I wasn't able to do perform music in groups. My school job went online; the church that employs me paid me to provide music for them virtually. It was tough missing human closeness and physical touch. Zoom is a valuable tool, but technology cannot take the place of a human presence in the room.

Chris Airiau: I was hired right after France's first lockdown in June 2020 to teach English at Poitiers University. That fall we taught on-site, masked and classrooms at half-capacity, with students on a two-week rotation schedule. This meant one half of the class was on-site for a lesson plan, and the other half was at-home doing a separate online lesson plan. For many reasons this was not an ideal situation, especially for first year students.

After five weeks of class, the university went on fall break, during which President Emmanuel "Big Mac" Macron announced the second lockdown. Luckily, the university expected this, and we initiated the videoconferencing plan. For some reason, they stuck to the two-week rotation schedule. Go figure.

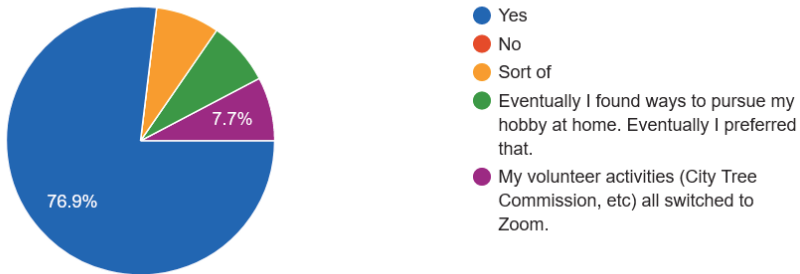
Gregory: I was on leave that whole spring. School continued, but it became online.

Logan Brown: Yes and no. I am a PhD student, so all of my classes, both teaching and taught, more or less immediately moved online after IU's "double" spring break. After that I struggled along with all the other teaching staff (since I am, god knows, not faculty) to move my teaching online. Since I had already taught a hybrid class in my MA program, the move was actually quite natural for me. Most of

my fight through that period was ensuring that the Media School wouldn't try to force grad students into classrooms come Fall 2020.

Were you able to work remotely?

13 reponses



Describe your remote work experience.

Dedaimia Whitney: I like Zoom meetings better than in-person. No travel time, and you can meet in your bathrobe.

Jason Thiagarajan: Not fun, but I got to wake up an hour later.

Karen A. Wyle: Much as usual—doing legal research and writing, and creative writing, on my computer.

Thiagi: I do training. Most of my clients have discovered that virtual classrooms are effective and less expensive than in-person classrooms. They will continue using virtual classrooms. They will also use online strategies for meetings and discussions and brainstorming.

I participated and facilitated several zoom sessions. Actually I preferred them to in-person sessions.

Raja Thiagarajan: I'm a professional full-stack web developer. The server doesn't care if I'm connecting from my office or my living room. The machine in my office is theoretically more powerful and has more bandwidth, but that's less important in practice. The lack of table space for multiple monitors hurts, though!

Evan Wineland: I set up my laptop and two monitors in my living

room, creating a desk with a table and monitor stand. It made for a very difficult work/life separation when my entire work day and after-work relaxation were only five feet apart.

Alek: I am lucky to work in software and with distributed remote teams. I did miss face-to-face meeting people at work but I did not miss commuting. Overall I think we got really lucky that internet and technology made group videophone to be just work. Next stage VR/AR?

Vance Reese: For the most part it worked well for me as a teacher. I'm not so sure it worked as well with the students, though I tried to come up with clever ways to keep them engaged. I was happy to record music on a terrific organ, piano, and harpsichord (sometimes accompanying other instrumentalists), and send this in for the "virtual church service."

Ignacio: I had to figure out online teaching. I'm not sure I succeeded, but it could have been worse.

Chris Airiau: Poitiers University had shut down during the Fall break (Oct 30, 2020), so I taught from home on Cisco Webex Meetings (basically Zoom). My students didn't care for videoconferencing teaching, but they also didn't care for (half) in-person English classes in September & October. I was given high-school level lesson plans to regurgitate, so it would have been an even more painful experience in person. But hey, the three classes I was allowed to create myself were fun.

Gregory: I hated teaching through Zoom, because I couldn't make eye contact and I couldn't be with my students. Without human contact, the feedback loop was cut off. I might as well have been making videos.

Logan Brown: Teaching students—even college students—by video is simply untenable. I have come around to the mode of thinking that the real value of a college education is not in the content as in the form; which is to say, that the real lessons imparted by college to those interested in receiving them are disciplinary mechanisms. In college, one learns how to listen, how to attend (in both senses of the word), and how to focus. Or at least that is the idea.

Ultimately, it wasn't a miserable experience, but neither was it a

satisfying experience. Like everything else in the pandemic, working through it felt mostly like moving in a vacuum: sure you can tell you're moving, but it's an impersonal, non-human movement devoid of purpose or purchase.

Did you use videoconferencing for leisure activities? How so?

Logan Brown: Is this a trick question? I used it for SFDG at the very least! I also often used (and continue to use) it to connect with friends back east. We also used it to speak with family to celebrate birthdays and holidays that we did not get to spend with them.

Vance Reese: Yes. With a group of friends that play games on Saturday nights, for talks with family members and friends. In some ways, the experience is great. I didn't need to travel. I missed human presence, but being a bit on the introverted side, I could make do.

Sparky Malarky: No.

Jason Thiagarajan: No.

Raja Thiagarajan: I got to participate in my second-ever Worldcon: Conzealand. I also got to attend various online SF conventions.

Thiagi: I played games like Scrabble with other people. I also played games alone and put my scores on a wall of fame.

Alek: Videocalls with family and many many virtual meetups—space or physical location was no longer an issue...

Karen A. Wyle: I'm in two book groups, which switched to Zoom meetings. Late in the more active phase of the pandemic, my uncle celebrated his 97th birthday via Zoom.

Chris Airiau: After being introduced to Jackbox Games on Zoom with some American friends, we started a Tuesday "Game Night" ritual with some friends in Germany. We played games on Steam while chatting using Webex, or combined BoardGameArena and Google Duo. I also learned to use the virtual-table-top website Roll20, and launched a sci-fi role-playing game with my partner and two friends.

Evan Wineland: My friends and family did Zoom calls to catch up or to play online games together. But it got less enjoyable as work

became so videoconference heavy with team meetings and vendor trainings. The fatigue of being on camera constantly was real.

Dedaimia Whitney: Yes. One of my closest friends and I Zoom every week still.

Gregory: Yes, for SFDG.

Ignacio: Just with the SFDG.

Have you participated in an SFDG Zoom session? If so, how did the experience compare to in-person meetings?

Ignacio: In person meetings are better. Even better if the meeting is at a bookstore.

Chris Airiau: A few times, but I usually left early due to the six hour time difference between the US and France.

Alek: Great as the last time I was at an in-person SFDG meeting in Bloomington was over 10 years ago.

Raja Thiagarajan: I'm the host, so yes ;-).

There are some pluses—saving on gas! Saving on restaurant costs!—and minuses—not as much fun food and fun times hanging out IRL with my friends.

Evan Wineland: I was glad we could continue our monthly book club meetings, even if the videoconference fatigue made it slightly less enjoyable. There's just something better for me when we can enjoy a meal or dessert together while discussing the book.

Gregory: It's far worse than face-to-face, but people who are distant got to participate, so that made it better.

Karen A. Wyle: It's more convenient, even though our meetings had been fairly close to where I live. I enjoyed getting to “meet” people who had moved away from Bloomington before I discovered the group, and now joined in.

Dedaimia Whitney: I like it, although my tolerance for Zoom meetings appears to wear out after about 60 minutes.

Sparky Malarky: I tried. I really did. But I found it impossible to concentrate on the books, I think because I was depressed. And I found that I just hated the Zoom sessions. The best part of the SFDG

for me was getting out and seeing everyone. And getting out. And maybe having a snack? And did I mention getting out?

It was lovely to see some of the SFDG members from far away, but I hate Zoom. I'm sure it works for classes and business meetings, but it's not the same.

Logan Brown: I did! And I can honestly say that the Zoom sessions certainly filled the social void of quarantine life. That said, I still think it lacks some of the spontaneous energy of in-person meetings. Zoom requires a certain order that can be more fluid and more implicit in meatspace. I certainly don't prefer Zoom.

Do you think life will get back to normal? If so, when?

Sparky Malarky: I hope so. So much has been lost that can't be recovered. I think eventually we'll all settle into a new normal. It may not be as it was, but it'll seem normal to some of us. The younger we are, the more normal it'll seem.

What IS normal anyway?

Alek: It is normalish today, as they said in Jurassic Park, life will not be contained, life finds a way.

Karen A. Wyle: I don't know. Bureaucratic expansion is very difficult to reverse, and we were already well on our way to a fear-dominated, risk-averse culture before the pandemic hit. I do think mask mandates will fade away by (maybe) the end of 2021.

Thiagi: Spring 2022. The new normal will be different from the previous normals.

Vance Reese: I'll guess that maybe by next summer (2022) we might be able to be "somewhat normal."

Jason Thiagarajan: In a few more election cycles (12-16 years maybe).

Ignacio: Kinda. I'm glad all the kissing that was going on here ended for a long time to come. It's hard to predict a date for going back to "normal".

Gregory: Define normal. This is a respiratory disease. This will eventually become like the flu, where there will be changes every year

or few years, and you'll have to get a shot, like the flu. Eventually it will just be part of the background.

Raja Thiagarajan: There will be a new normal, but it definitely won't be the same as before. There is a lot of stupid pressure from higher-ups for us to work in the office again, but they pretty much dismantled our offices in favor of uncomfortable "hoteling" setups that don't really work that well, and there's no privacy, and everyone can hear everyone. Or so I am told by a coworker whose group has been required to work onsite every Tuesday.

Dedaimia Whitney: It doesn't look like it's going to happen any time soon. Thank you, Delta. Soon to meet you, Mu.

Evan Wineland: There is no back to normal. This is the new normal. The closest thing to "back" will be when everyone accepts we all have to be vaccinated the same way we do with kids going to school, or attempting to minimize the annual impact of influenza.

Chris Airiau: No. There's no way to go back to the way it was before. Too many people have died. Too many people have lost their jobs. Too many people have suffered, and will continue to suffer due to this virus.

Will we ever get back to a world where we don't have to wear face masks all the time? Maybe yes, in another few years when the COVID booster is a regular thing, like the flu shot. In Europe, I'm certain the use of our "vaccination passport" will be extended to more and more public activities, to be called upon when new variants cause another outbreak.

Logan Brown: As I said before, quarantine was not, by and large, an irruption of some alien reality into ours - it was an intensification of the processes that were already unfolding. So while certain things will go back to "normal," I do think the pandemic will, in the long term, prove to be a cultural and economic shortcut that took us further down the road we were already traveling. Despite the present labor-friendly market, late capitalism will continue to gig-ify work, sending it piecemeal into the home. Complete social alienation and isolation will continue apace as the social fabric continues to unravel. Cultural fragmentation and epistemological solipsism will remain the order of

the day. And the culture industry will turn an amazing profit all the while.

What do you think will be the historical significance of the COVID-19 pandemic?

Sparky Malarky: Ya got me.

Dedaimia Whitney: It's not over yet. If it continues to kill people around the world, it may be the biggest population thinner of all time.

Jason Thiagarajan: Like the spanish flu but worse, no black plague or anything.

Raja Thiagarajan: As with the pandemic of 1918, the world will change. If the pandemic recedes, we may get something like the "roaring 20s" again. As with the pandemic of 1918, the lessons will be forgotten in a century (or less) and we're likely to go through this again.

Chris Airiau: Hm, the influenza pandemic in 1918 preceded a rise of fascist governments that ended in a World War...

Jokes-frighteningly-close-to-reality aside, the pandemic is a monumental source of mis- and disinformation, and will surely be linked to the historical trend of fake news.

Vance Reese: Perhaps a wiser approach to handling a pandemic nationally. (That's being VERY optimistic).

Alek: Hopefully, more equality in access to work and education.

Evan Wineland: The continued demonization of education and science in one half of American society. The continued idea that doctors and scientists would actively do harm. The incredible ignorance needed to believe that the nonsense someone finds on the internet or social media has been missed by the experts who have spent their lives researching how to prevent the mass death events like this one.

Karen A. Wyle: I fear longterm effects on the social development of children who spent many months at home away from other children, and then interacted with non-family members only with some or all parties wearing masks. If there's no backlash against the

expansion of federal and state power over individual choices, that will continue a change in our national character that was already underway. On the other hand, now that more parents have seen the extent to which education has been politicized, there will be more pushback against it and a modest increase in the number of parents home-schooling longterm.

Logan Brown: It depends—which history are you reading? I think cultural history will find the pandemic to be the most fertile, since we’re already seeing reflections of pandemic life rippling through pop culture. The saturation of time loop stories is a prime example of pandemic phenomenology thrown up onto the screen. But I think politics, economics, and the stuff of big-H History will largely see this moment as the acceleration I described above. Even the more plausible sociotechnical changes on the horizon—online teaching and MOOCs, the decline of the office and the rise of cybercommuting, the death knell of brick and mortar retail—have been approaching for a long time. The pandemic was just an immediate catalyst, a proximate cause.

Any parting thoughts?

Vance Reese: It was the best of times. It was the worst of times.

Sparky Malarky: Time’s arrow only flies in one direction. What’s done is done. COVID? It is what it is.

Could’ve been better. Could’ve been worse.

Raja Thiagarajan: One real gift of the pandemic has been Zoom (and other collaborative tools).

Alek: It was great to re-connect with SFDG, otherwise I would not have this opportunity to participate in Loop Garou if not for our Zoom meetings.

Evan Wineland: It feels like so long ago this all started. It’s terrifying how many people are trying to act like it’s over, while hundreds of Americans die every day.

It’s both interesting and infuriating how the rage of this pandemic comes back as I think back on it.

Dedaimia Whitney: I forgot to say that one of my closest friends

died during the pandemic, although not from Covid. Going to see her and grieving were much more difficult because of the virus.

Gregory: I guess I just find it strange that people care so much about COVID. It's a disease that's impacting the rich world. There are many, many diseases that kill many, many people all over the world, many of them children. A pandemic like this was inevitable; it's just a question of time.

Chris Airiau: I'm saddened that so many people have been made to not trust in life-saving science.

Logan Brown: I wonder if the pandemic's lasting gift to American society in particular will be the very notion of the "new normal" which has circulated in academic circles for so long. What if the real impact is not a new normal (because every normal must have been new once) but the naturalization of rapid normalization. A resignation toward the normal. I wonder how many New Yorker readers, armored with this pithy phrase, can now safely identify signs of this "new normal" as it arises and thereby rob it of some of its terror. This seems particularly bleak in the face of America's present political reality in which the slaving right is full of passionate intensity and the liberals find themselves unable to guide even the most basic forms of collective action. Perhaps, in reference to the history question above, this is a turning point for theories of change, both scholarly and popular, for either good or ill.

Ignacio: All things end.

AFTERWORD

EDITORIAL

RAJA THIAGARAJAN & CHRIS AIRIAU



Raja Thiagarajan

IT HAS BEEN 31 YEARS, give or take, since we published the previous issue of *Loop Garou*. Members of our Science Fiction Discussion Group have joined, left, gotten married, divorced, and had children or grandchildren.

The world was quite different in the summer of 1990. Computing,

which had made the previous two issues of *Loop Garou* possible, has become far more powerful and largely shifted online. The previous two issues of *Loop Garou* were designed to be printed on paper and distributed that way. This issue is not; our primary goal is to create an EPUB file that can be read on most popular computers, tablets, and smartphones (the latter two of which did not exist in 1990), and our secondary goal is to create a PDF that can also be read on most computers. It's also possible to print the PDF on paper, but don't blame us if you end up with a lot of blank pages.

Why did we decide to do another issue after 31 years? I had some paper copies of our last two issues and I ended up scanning and making them available to our members. A couple members were fascinated by how people reacted to the rise of cyberpunk at the time, rather than in retrospect. (I believe that history is bunk, inasmuch as histories written years later slant the story, subtly and unsubtly, to favor the "winners", and that's not the way it felt at the time. For instance, many histories of microcomputing are slanted in favor of Microsoft to the extent that it feels like their competitors were fools or inevitably doomed, and that's just not true.)

In the year 2020 the world underwent a major change as a pandemic raged across the planet. This had been a topic of several science fiction stories, but SF got many of the details wrong, and it certainly didn't capture the *feel* of living in such times. It turned out that some other members of SFDG were interested in helping to create a new issue of *Loop Garou*. We wanted to capture the feeling, and were encouraged by the availability of so many low- or zero-cost tools for collaboration and content creation.

(I also enrolled in a writing class taught online by a well-known SF writer, and it awakened the fiction-writing part of me that had been dormant for decades. I didn't restart *Loop Garou* just so I'd have a place to put my fiction, but it didn't hurt.)

The tools were so much better than what we had 31 years ago that I thought the issue would be done in a matter of weeks, but it ended up taking several months. Of course, I am a software developer, and software developers are ridiculously bad at time estimates. (One of our artists manages developers, and his estimate was almost dead on.)

In any case, here is the sixth issue of *Loop Garou*. It's the largest issue we've ever done, and we hope you enjoy it.

Chris Airiau

Putting together *Loop Garou 6* has been a trip.

Raja first broached the possibility of creating a sixth issue of *Loop Garou* in February 2021, and the effort began in earnest in June 2021 when I asked to be a co-editor. My academic background is in English literature, and in the past decade while teaching in France, I've learned how much I enjoy the editing process. I could go on about all my side-projects over the years, but needless to say, I was eager to begin another.

We thought we would publish *LG6* in late July, or at least August, ha! For five months, we coordinated through DokuWiki, Signal and Zoom, pushing back the publication date and scraping for time in our schedules to edit, write, share resources, rewrite, revise and edit some more. Alek did say an October or later release would be the most realistic, but we were naïvely optimistic. My expectations of time management for project planning and collaboration have improved through this process, though they're not honed to a sharp point just yet.

Our biggest mistake, I think, was the submission window: a short period in the middle of summer vacation is not the best moment. I'm surprised we received as many SFDG submissions as we did. For accepting to work with us during the limited frame we gave, I want to extend a big fat "Thank You!" to our correspondence contributor Ignacio Viglizzo, our nonfiction contributor Gregory Rawlins (thanks for the Shakespeare lesson!), and our fiction and music contributor Vance Reese. Another big thanks goes out to Alek Slominski for offering to take the multimedia editor role should the need have arisen, and for conceptualizing and creating the cover art for *Loop Garou 6*. I also want to thank our art contributors: my brother-from-another-mother Ben Specklin for his panels on "Practice Makes Perfect", and Lee Sargent for giving us the green light to use his artwork in our "Ramblings on Star Trek" article. Finally, a special

thanks to Michael Sullivan for accepting a solicitation of his March 2020 SFDG email for this issue's epigraph.

Creating *Loop Garou 6* with Raja was a blast. Looking on this issue, I see a sort of fencing act between our pieces—a call and response, a strike and a riposte. As you can see, Raja gained ground in the fiction category (I hope you enjoy his stories as much as I do; I'm trying to convince him to submit to pro magazines). Our nonfiction seems to me an emulation of conversations we'd have during SFDG meetings, which I miss very dearly.

I see now, just as I write this, that this project was my attempt to reconnect with all of you. Reading the responses to the COVID-19 survey was a special experience for me. Like listening to a book meeting recording, I heard your voices as I read ("Sparky" especially so!). I attempted to edit those responses into a flow of conversation, to recreate the experience of sitting in Dedaimia's living room, or at the wooden tables of the now-long-gone Barnes & Noble, to feel like we were together again. Because it's not only me over here in France, Ignacio in Argentina, Steve(n) in California, or Alek in NYC who's missing out. The pandemic has pulled us all away from each in a way the metaverse cannot yet replicate.

Raja and I plan on continuing *Loop Garou*. There were a few SFDG members who were interested in submitting, but didn't have the time to submit for issue 6. Raja and I also have more fiction and nonfiction in the works. We also tentatively plan on testing out a new publishing tool, which may allow for more control over the end-product. Plus, it's just been a lot of fun. Good times with good friends is what it's all about.

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**APPENDIX: ANOTHER COVER
DESIGN**

RAJA THIAGARAJAN

LOOP GAROU 06

We're Back!



YEAR 2021

ISSUE NO. 1

Please wear a face mask
and keep social distance

SF, FANTASY, HORROR, AND/OR COMICS

HERE'S an early cover design that Raja made using the online tool Canva (<https://www.canva.com>).