

OPUNTIA 465



Edgar Allan Poe’s Birthday 2020

Opuntia is published by Dale Speirs, Calgary, Alberta. It is posted on www.efanzines.com and www.fanac.org. My e-mail address is: opuntia57@hotmail.com When sending me an emailed letter of comment, please include your name and town in the message.

GUNG HAY FAT CHOY 2020

photos by Dale Speirs

The cover photo shows the eastern gate into Calgary’s Chinatown. The 2020 Lunar New Year was January 25, marking the Year of the Rat. There are no rats in Alberta, which is the only political jurisdiction in the world that is rat free.

The celebrations in Calgary were so extensive that the Chinese Cultural Centre began them two weeks in advance. Much like the Calgary Stampede rodeo, which is in early July but celebrating it begins in middle June. Cowtowners love a party, so there was lots going on.



The third week of January was continuous -30°C weather, what Americans call the polar express but we call a normal winter. My house thermostat was set at 24°C but the furnace, running constantly, had trouble keeping it at 22°.



Fortunately a chinook blew in on the evening of January 18 and raised the temperature to 2°C within a few hours.

I went down to the CCC the following day. The photos show its western side and the interior.



Calligraphy displays. It was all Greek to me.



The dragon dancers club table in the dealer bourse.



At far left:
Looking down at the bourse.

Above:
These were hand-cut lace patterns.

Near left:
A dealer in jellied elk horn slices.
Some people will eat anything.

A few blocks away in the downtown core, the skyscrapers along 7 Avenue South are connected by an atrium. They celebrated as shown here.



EDGAR GALLOPING POE: PART 7

by Dale Speirs

[Parts 1 to 6 appeared in OPUNTIA's #325, 332, 344, 356, 370, and 433.]

Poe Considered As A Festival.

PROSE AND CONS (2016) by Amanda Flower was a novel in a cozy series about bookseller Violet Waverly of Cascade Springs, upstate New York. With her grandmother Daisy, a tuxedo cat named Emerson, and a pet crow named Faulkner, they operated a bookstore.

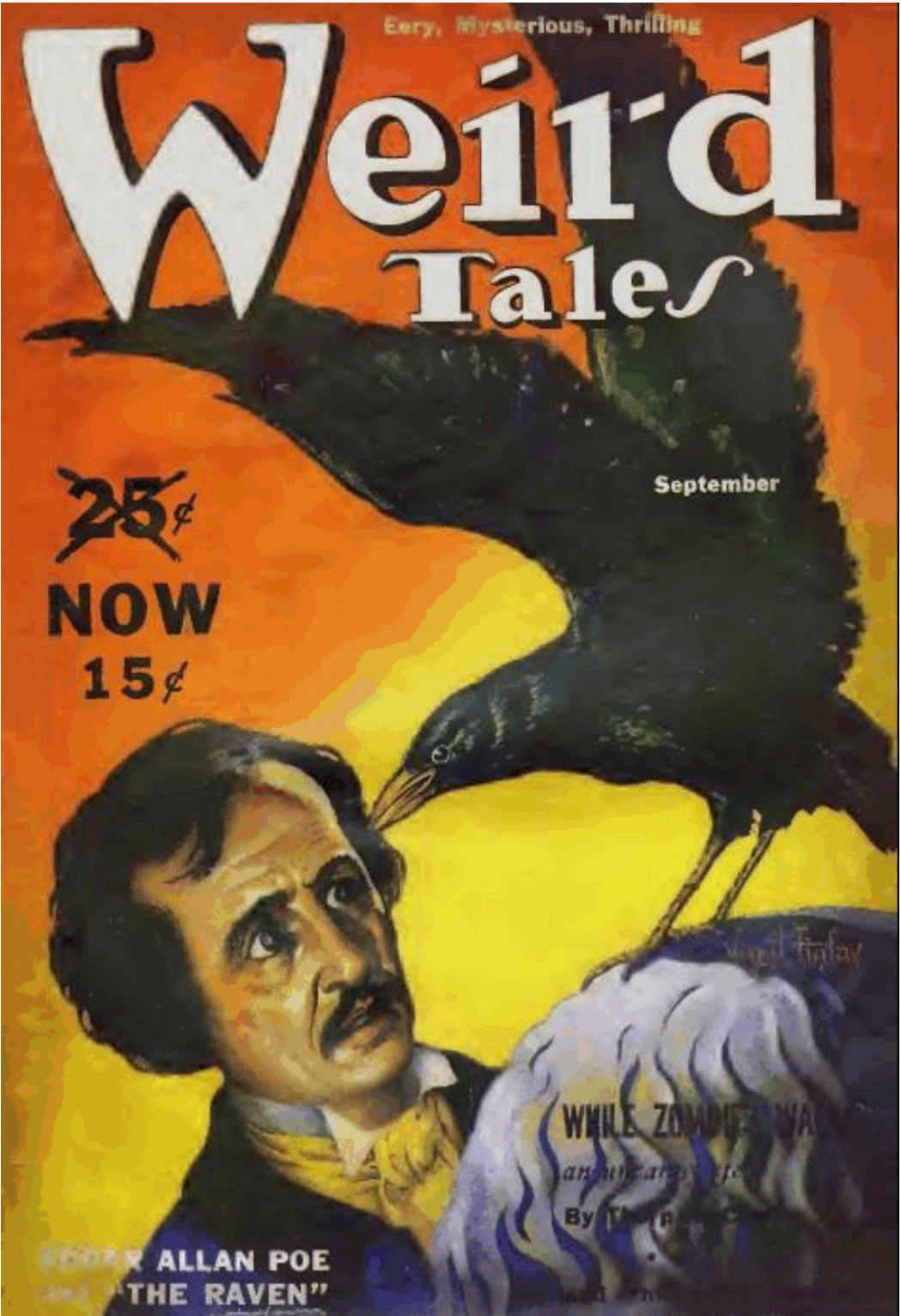
The novel was set in October during the village's annual Food and Wine Festival, which that year was celebrating Edgar Allan Poe. Violet and Daisy tried to tap some of those tourist dollars by having a local writers group, the Red Inkers, read from the works of Poe in the back garden of the shop. Faulkner added ambiance by occasionally croaking "Nevermore!"

Violet discovered the body of one of the writers, and it became evident that the clues were linked to Poe's works. As any experienced Miss Marple would, she did a break-and-enter into the deceased's house. She found a secret den equipped for writing, and discovered that the late Anastasia Faber was the bestselling author Evanna Blue.

The vital clue seemed to be something hidden in plain sight like a purloined letter. The murderer was a dear old lady who just wanted to cause trouble for Faber/Blue by sickening her with poison so she would flub her lines during the Poe readings. Unfortunately the killer miscalculated the dosage.

The final held-at-gunpoint incident was resolved when Faulkner distracted the murderer, allowing time for a bookcase to topple over and crush her. Faulkner only cawed. It would have been too much, even for a cozy, to have the crow shout "Nevermore!"

At right: The 1939 September cover of WEIRD TALES



ANTIQUES RAVIN' (2019) by Barbara Allan (pseudonym of Barbara and Max Collins) was a novel in a cozy series about Brandy Borne and her elderly mother Vivian. Both were on medications which they didn't always remember to take. They operated an antiques shop in the village of Serenity, Iowa.

As the novel began, Vivian had just been elected county sheriff. This was the sixteenth novel in the series, and she had campaigned on her record as a Miss Marple able to solve any crime. It made sense. Since her driver licence had been revoked, she made Brandy a deputy and chauffeur. Yes, that's right, the Miss Marples and the Deppity Dawgs were now one and the same.

The nearby hamlet of Antiqua was hosting Edgar Allan Poe Days on the first weekend in August. The gimmick of the place was that it was a cluster of antiques stores. For their festival, they hid a Poe collectible worth thousands in one of the shops and priced it at \$25. This was a scavenger hunt to bring in tourists. Clues about the item were announced day by day.

Since the hamlet was in the county's jurisdiction, Vivian was called in to investigate a set of break-ins at some of the antiques shops. Evidently someone was looking for the Poe item, which was not publicly identified for obvious reasons. It was an 1845 anthology which had Poe's "The Gold Bug" in it.

The first murder victim was found by Brandy in the Antiqua cemetery. The mayor was almost next, but was found walled up in a church basement a la Fortunato. The murderer was more successful with others and the death toll steadily increased. Each victim was disposed of according to one of Poe's stories.

The crimes were an attempt to distract police and Marples from an unrelated bank robbery by His Honour The Mayor himself. He faked his own kidnapping but his accomplice couldn't be trusted. He tried to make a run for the county line with the Bornes in hot pursuit, but failed to beat a train across the tracks, thereby saving the State of Iowa the cost of a trial.

The book read well but was plagued by the same problem as previous volumes. Every so often, Vivian or Brandy would break the fourth wall and address the reader directly. Annoying.

Collecting Poe.

THE MAD HATTER MYSTERY by John Dickson Carr was originally published in 1933 and is now available as a 2019 reprint by Otto Penzler, the well-known mystery publisher and bookseller. It was the second novel in the Dr Gideon Fell detective series. The character's physical attributes were modeled on G.K. Chesterton, who was a close friend of Carr.

The novel opened with London, England, under a reign of terror by the Mad Hatter, an unknown criminal who snatched hats off the heads of passersby and shortly after deposited the hats at conspicuous places. Okay, not terror, but certainly a reign of annoyance. Newspaper reporter Philip C. Driscoll went to town on the story.

Parallel to that narrative, Sir William Bitton had an unpublished Poe manuscript stolen from his collection. He had acquired it under dubious circumstances, and may not have had clear title to the manuscript. Consequently, when it was stolen, he did not want to raise a public hue-and-cry with the police. He preferred to hire Fell to look into the matter with discretion.

The two threads intertwined when Driscoll, who was the nephew of Sir William, was found murdered. A stolen hat had been jammed over his head, and a crossbow bolt was embedded in his chest. There were a panoply of suspects, but numerous other threads appeared, connecting characters thither and yon. The police surgeon was named Watson, and as he made it clear upon arrival at the crime scene, he would not tolerate any jokes about the Dr Watson.

The story spent most of its time on the physical details of the murder but attention shifted to the Poe manuscript. Julius Arbor was an acquaintance of Sir William, a collector newly arrived from America. Fell threw Arbor off balance by asking questions not about the murder but about Poe incunabulae.

Arbor mentioned that the stolen Poe manuscript antedated "Murders In The Rue Morgue", which is considered the world's first detective story. If so, its value would easily exceed £10,000 in 1933 currency. Arbor claimed that he had lawful title to the manuscript and that Sir William had stolen it.

Suspicion was everywhere but the murderer was finally revealed as a member of Sir William's household. Driscoll and Arbor were in on a plot to steal the manuscript when a falling out occurred between thieves and receivers of stolen

goods. In a panic, the murderer burned the manuscript in a fireplace, a greater tragedy than Driscoll's murder.

THE BOOKMAN'S WAKE (1995) by John Dunning was a novel in a series about Cliff Janeway, a former policeman turned bookseller. He was recruited by a former cop Clydell Slater to help trace a burglar named Eleanor Rigby, who insisted that was her real name.

She had skipped bail, leaving the bondsman on the hook for \$50,000, so he hired Janeway and Slater to track her down. With her went a rare edition of Poe's "The Raven", printed by the Darryl Grayson small press in a limited edition with artwork by a famous artist.

Grayson had a fratricidal feud with his brother, who had deliberately sabotaged a later edition by changing one word to 'craven'. It was psychological warfare. It succeeded to the extent that Grayson became a serial killer, murdering those owning the sabotaged copies lest they actually read the text.

The ending was messy. The denouement was an extended who did what to whom. The basic concept was interesting though. More than a standard chasing the MacGuffin plot, and with some new ideas about the blood soaked world of book dealing.

CLASSIFIED AS MURDER (2011) by Miranda James (pseudonym of Dean James) was a novel in a cozy series about Charlie Harris of Athena, Mississippi. He was more or less a freelance librarian, working for both the public and the college libraries, usually accompanied by his cat Diesel.

Wealthy book collector James Delacorte hired Harris to inventory his collection. He suspected someone in his family was stealing books. Delacorte survived about one-third of the way into the book before being murdered at his desk. He had named Harris as executor of his will, and bestowed his book collection on Athena College, where Harris worked part-time as a librarian.

Almost immediately the discovery was made of the theft of a copy of Poe's book TAMERLANE, incredibly rare and worth millions. Harris carried on both sleuthing and as executor, despite his dysfunctional family and the greedy heirs. The latter were miffed that most of the estate had been left to the butler Truesdale.

Delacorte's sister was the next victim. The assumption was that whoever stole the book was the murderer. Diesel was responsible for identifying the thief when he poked his nose into her handbag and found the missing book. She was not, however, the murderer, but a member of the Delacorte family operating independently.

She tried to claim the TAMERLANE was her own copy. Since the few remaining copies are well documented, that didn't wash. Two copies found in a Mississippi village passed all reason. The murderer was separately nabbed and proved to be Truesdale. Yes, the butler did it. He had gambling debts that needed to be paid and couldn't wait for the old man to go by natural means.

Pastiches.

I constantly find neat stuff at www.archive.org, including scanned issues of WEIRD TALES. The 1923 March issue contained "The Sequel" by Walter Scott Story, a follow-up to Poe's "The Cask Of Amontillado" told from the point of view of Fortunato. It began after that unfortunate man had been walled up alive by Montresor.

Fortunato didn't exactly get free with a single bound, but he did manage to pull his manacles from the wall, then kick out the freshly mortared bricks. He re-set the bricks so Montresor wouldn't know that he had escaped, then snuck out of the house unnoticed.

From there, he went to his house, gathered his portable wealth, met Montresor's wife at their usual place of assignation, and the two left the country to start a new life. A nice secret history that didn't alter the original story.



**IF YOU AREN'T SQUAMOUS,
THEN WHY ARE YOU TRYING TO BE ELDRITCH?: PART 11**
by Dale Speirs

[Parts 1 to 10 appeared in OPUNTIA #298, 333, 340, 352, 365, 395, 410, 415, 422, and 443. Issues #22 and 63.1A have related articles on H.P. Lovecraft.]

Critical Editions.

In OPUNTIA #443, the first volume of THE NEW ANNOTATED H.P. LOVECRAFT was reviewed. The second volume has now been published, dated 2019, and is distinguished from its predecessor with the subtitle BEYOND ARKHAM.

The volumes sell for about \$40 each, so if ordering online make certain you get the titles straight. Well worth it for the serious Lovecraftian. Actually if you don't have any HPL story collections, these two volumes would be the best choice because the annotations put his stories into context.

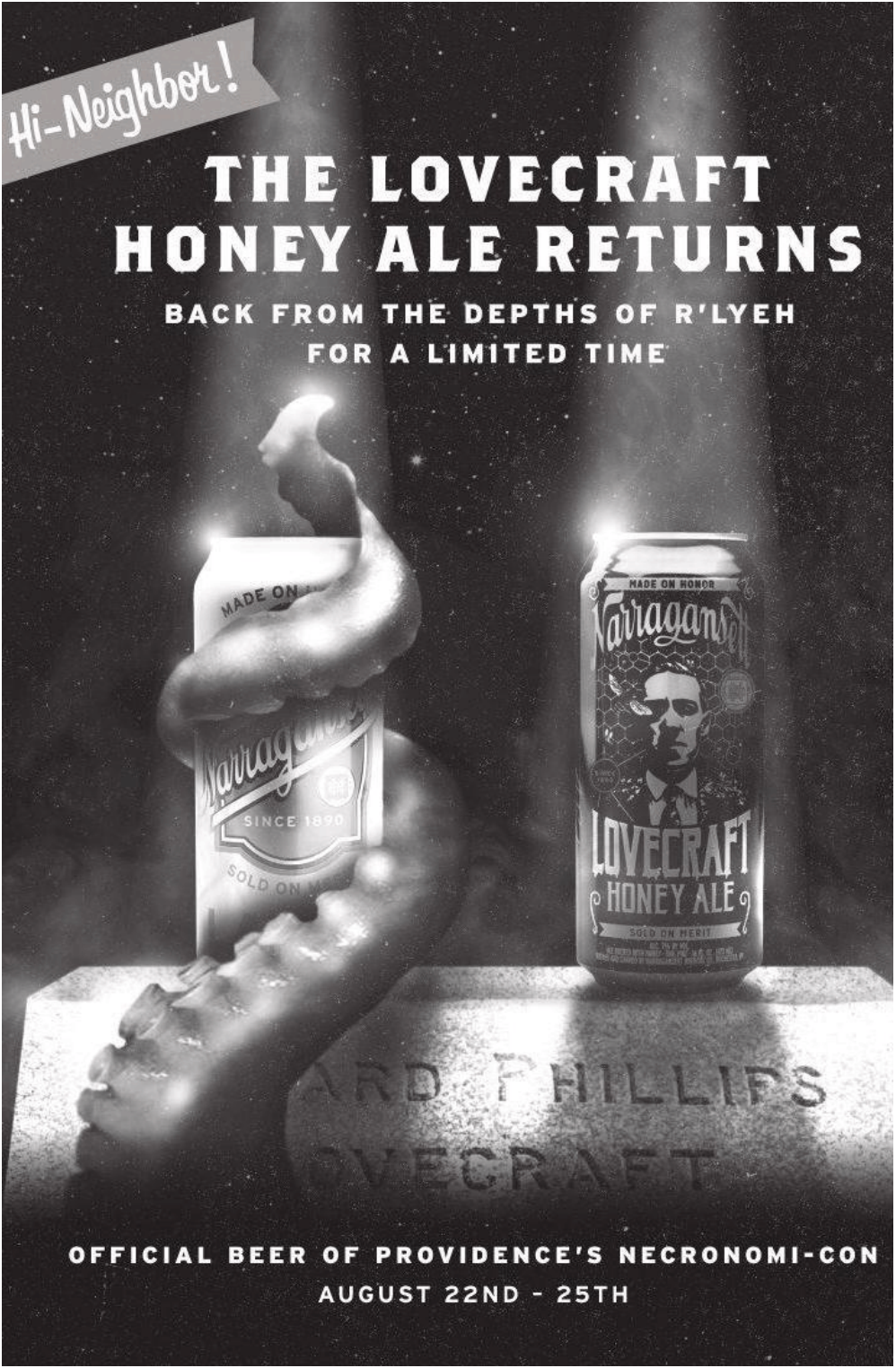
The second volume is a doorstep-sized tome of 490 pages, with 25 more HPL stories copiously annotated by the editor Leslie S. Klinger. Not much more I can add that I didn't already mention in my previous review. If you don't have any HPL collections, these two volumes will do the job. The annotations help explain the context of the stories when they were first written, a far different world than what we live in today.

Anthologies.

CTHULHU LIES DREAMING (2016) is an anthology of 23 stories, edited by Salomé Jones. In keeping with the modern trend, the stories are not necessarily explicit pastiches of H.P. Lovecraft's Mythos but certainly follow the theme.

As seems to be the trend in the modern Mythos, there is very little namechecking of Cthulhu and the gang. Rather the creatures described are such that a Lovecraftian could identify them without a name given. Indeed the word 'batrachian' outside of zoology is now almost entirely associated with Lovecraftian fiction.

Some of the stories had a sameness that was repetitious. Seaside dwellers in a fishing village had psychological problems, had to go down to the sea, and wade



out into the water, at which point the story would end. Other plots were slightly more diverse, some incorporating modern technology, for who is to say the Elder Gods wouldn't use it.

The stories are on the whole well written, not the pulpish style that one expects from Mythos pastiches. August Derleth wouldn't have written them this way, but then again he is dead.

Parodies.

SLIMY UNDERBELLY (2014) by Kevin J. Anderson was a novel in a humourous fantasy series about Don Shamble, a private detective in the Unnatural Quarter of a large city. He was described as a zombie, although the real cause of his death was a bullet in the forehead. He lived, you'll pardon the expression, in a world of werewolves, ghosts, ghouls, and other differently fleshed denizens.

The novel opened with Shamble taking on the case of opera baritone Stentor, an ogre who had his voice stolen from him, leaving him with squeaky vocal chords. More seriously, there was big trouble down in the sewers, where a new boss named Ah'Chulhu (without the 't') was making a move to consolidate his power. As informant Edgar Allan Troll said to Shamble: *The sewers are growing restless, and there's no telling what's lurking down there.*

Al'Chulhu was in the real estate business as a rental landlord. His minions were alligators that had been flushed down the drains when they got too big as pets. Da boss had a head full of tentacles but preferred to dress the lower half of his body in a business suit. He spoke with an Australian accent because, as he told Shamble, he was from down under.

There was method in Al'Chulhu's madness. He rented out laboratory space to mad scientists, and snuck a clause into the lease stating that he got intellectual property rights on their inventions. He was hampered because he wasn't the only one seeking to rule the world, for every mad scientist had the same idea. Entirely too much bwah-ha!-ha!-ing but no one can serve more than one master.

Al'Chulhu lost the battle against one of the mad scientists. His mistake was opening up a portal to the Netherworld and letting the Senior Citizen Gods over the threshold. There was more to the story but readers are invited to wade through the ichor on their own.

WINTER WONDERLANDS: PART 3
by Dale Speirs

[Parts 1 to 2 appeared in OPUNTIA's #405 and 437.]

Snow Globes.

Snow globes date back to the 1870s. One wouldn't think it, but there is a fair amount of fiction out there about snow globes, some titles of which I reviewed in Part 2 of this series.

THE SNOW GLOBE (2010) by Sheila Roberts (pseudonym of Sheila Rabe) is a sentimental Christmas novel about a magical (or was it?) snow globe. The protagonist was Kylie Gray, who found a snow globe in an antiques store. The dealer told her it had been passed down from one generation to the next. A flashback followed, about how in 1880 a shopkeeper mourning the death of his wife in childbirth was given one of the earliest snow globes by his sister.

The globe showed the alpine village where he was born and an angel. Not long after, he met a woman who looked like the angel and the rest was obvious. After several generations, the shopkeeper's line of descent ran out and the globe found its way to the antiques store.

Gray was having her own problems, so she bought it as a talisman. Her troubles and those of two of her friends filled the middle part of the novel but all came out well in the end. Gray even met the last descendent of the shopkeeper. Having succeeded in her life, she passed the globe on in a rather unusual manner. She left it with a note on a ferry, trusting that it would attract someone who needed its blessing.

SNOW COLD CASE (2017) by M.Z. Andrews was the first novel in a fantasy cozy series. What was unique about this series is that the Miss Marple changed with each novel. This initial novel was about recently widowed writer Johanna Hughes, her dog Rocky, and her hunt for a Christmas present. She wound up in an antiques store where she bought a snow globe depicting a young woman in her bedroom sewing a wedding dress. A wardrobe behind her was filled with several other dresses.

From there, events proceeded. The store had a cat lurking around the snow globe. The feline followed Hughes home. The first time Hughes shook the

snow globe, the woman inside the globe suddenly appeared in the living room full size, and the cat began talking. Needless to say, Hughes was astonished.

The two were actually sisters who had been cursed, Whitley inside the globe and Esmeralda turned into a cat. The globe contained a wardrobe with several dresses, each of which was related to a murder. The sisters would never be free and normal until all the crimes were solved.

Hughes had no choice in helping the sisters solve the first crime. She was informed that if she didn't, she would replace Whitley inside the globe.

There was a mystery to be solved, upon which basis the novel moved forward. The previous owner of the wedding dress, Felicia Marshall, had been murdered six years ago, so Hughes was on the case as a Miss Marple. She had considerable incentive.

Marshall had been murdered on her wedding rehearsal day. Step by step Hughes tracked down her life history. Several suspects were considered one by one, each time being cleared by a twist. The false leads were well written, each convincingly demonstrating the person had to be the killer.

The action ended at Marshall's former place of employment where Hughes followed the tradition of cozies and got herself held at gunpoint by the murderer. Not wishing to tempt fate any further, she returned the snow globe, with Whitley back inside, and the cat, to the shop she bought it from.

SNOW WAY OUT (2018) was the second novel in the series. The snow globe and the cat had somehow made their way out to rural Vermont. Evanee Woods, proprietor of a knickknacks store in the village of Stoney Brook, found the snow globe at a flea market. This time the image was of Whitley working on a lush Renaissance gown.

Once again the shake of the globe brought Whitley out into the real world, with Esmeralda as the Greek chorus, if a single talking cat could be considered a chorus. Woods put on the gown and was trapped. The deal was she had to find who murdered the previous owner of the dress, who had died in an arson fire.

The woman's husband, once a firefighter, was considered the suspect but never charged or convicted. Her infant son, Lane Dawson, now a grown man, was sullen and angry as understandable. Woods had to solve a decades-old murder.

She wasn't very good at it, with an innate ability to antagonize the two men and anyone else she tried to interrogate:

"Evanee! You actually asked him why he wasn't a firefighter anymore? That's terrible! You know perfectly well that his wife died in a fire. Why would you ask him something like that?"

"I was trying to be subtle."

She eventually made up with Dawson, to the point where they dated and investigated together. As the novel progressed, one suspect after another was convincingly identified as the murderer, only to have the spotlight swing to someone else. The changing view was well written, making the reader believe that it was all over except the shouting, then suddenly see there was someone else who fit the crime.

The main suspect was murdered near the end, and the killer trapped Woods in a burning house. She escaped, of course, and justice was done. Whitley went back inside the snow globe, to be dispatched with Esmeralda to a future novel.

Snow Mysteries.

LET GEORGE DO IT was an old-time radio series that ran from 1946 to 1954. (This and hundreds of other OTR shows are available as free mp3s at www.otrrlibrary.org) George Valentine was a private detective who ran a classified ad in the newspaper: *Personal notice: Danger's my stock in trade. If the job's too tough for you to handle, you've got a job for me. Write full details.*

The episode would usually open with the voice of someone writing the letter out loud, appealing for help. Sometimes Valentine would do the opening narration. The cases were not necessarily criminal investigations. The client might need him to courier a package or do some other strange, seemingly innocuous task. His secretary/girlfriend was Claire Brooks, whom everyone called Brooksie. She often accompanied him out into the field on a case.

"Snow Blind" was a 1949 episode written by David Victor and Jackson Gillis. The opening letter was from Mrs Morris, who lived in the mountains while her husband Herbert stayed in the city looking after his medical practice. Some marriages work better that way. She was worried about a woman named Dorothy Graham, who apparently was a threat to Herbert. Mrs Morris didn't have an entirely clear conscience with regards to her ski instructor.

Everyone wound up at the ski resort. Valentine didn't like being in the middle of what was obviously an impending divorce case. Graham turned out to be the ski instructor's wife. The doctor was killed in a car crash on the mountain road. No one believed it was an accidental death.

Further alarums and excursions followed. The ski instructor chewed up the scenery when Valentine accused him of the murder. A couple more twists and the murder was solved. This episode was sponsored by Standard Oil, who, in the final commercial, put in a plug for the importance of having their service stations change your windshield wipers.

Snowflake chocolate cupcakes from Calgary Safeway, 2019.



FOOD COZIES: PART 18
by Dale Speirs

[Parts 1 to 17 appeared in OPUNTIA #432 to 434, 436, 438, 441, 442, 444, 447, 450, 454, 456 to 458, and 460 to 462.]

Food cozies are Miss Marple style novels, very popular. Most are worth reading once if you like mysteries, although it is doubtful any of them will stand the test of time. Recipes are generally included, if not at the back of the book, then in between chapters or sometimes integrated into the text. Don't read these books if you have an appetite. I have learned from experience to read these novels on a full stomach.

Coffee.

Cleo Coyle is the pseudonym of Alice Alfonsi and her husband Marc Cerasini, who have written a long series of coffeehouse cozies. I reviewed a batch of them in OPUNTIA #444 and herewith are a few more. The Miss Marple of the series was Clare Cosi, who operated a coffee shop called Village Blend in Manhattan.

MURDER MOST FROTHY (2006) moved Clare Cosi out of the stifling summer of Manhattan to the cooler Hamptons of Long Island. She had been hired by David Mintzer to train the staff of his new restaurant. Little did he know. She was helping him with a gala that ended when one of his employees, Treat Mazzelli, was shot dead in his bathroom.

The question was whether or not the sniper who made the shot had been gunning for Mazzelli or had mistaken him for Mintzer, whom he resembled somewhat. There were several subplots going. The restaurant manager was embezzling via phony invoices. There was drug usage, blackmailing, unrelated murders elsewhere, and all the fuss and bother of Hampton's social life. Rich folk were feuding, and as they battled they trampled commoners underfoot.

The denouement was sorted out the hard way. Since there were multiple threads to the story, there were multiple offenders working at cross-purposes for different reasons.

After that, off to the recipes appendix to relax with Chilly Choco Latte, Rum And Coconut Coffee Smoothies, and Cocoa Mint Espresso Smoothies. To fill

the stomach there were Chocolate Walnut Espresso Brownies, Almond Torte (what? no coffee in it?), Chocolate Kahlua Cake. No dozing off after this meal.

MURDER BY MOCHA (2011) began with Clare Cosi trying to create an aphrodisiac coffee blend. Magic Mocha was to be sold on a Website called Aphrodite's Village. The launch party ended with the murder of one of the Webmasters. Others connected to the operation began to die.

NYPD Homicide investigated, but the reader will correctly surmise that Cosi would do a better job. The deceased was a wholesale buyer interested in the Magic Mocha blend, but why he was stabbed was a job for Miss Marple.

Beside the usual back stories, there were politics and bureaucratic infighting in the way of a quick conclusion. Not to mention a Swiss yodeler who worked for an adjacent business as a sidewalk shill, and upon whom everyone wished a painful death sooner rather than later.

The denouement was complicated. Basically the Magic Mocha was being used for both fraud and as a disguise for drug deals. The murderer got into a tight spot and was trying to clear a path to freedom.

The recipes appendix began with Aphrodisiac Brownies which, alas, had nothing more than chocolate, coffee, and cinnamon. Following on were numerous baked goods and meat dishes, none of which will ever help the reader in the bedroom.

A BREW TO KILL (2012) expanded the Village Blend coffee shop by adding a food truck called Muffin Muse. It toured the five boroughs dispensing premium blends. There was trouble though, such as a deliberate hit-and-run murder and, worse yet for the coffee truck, a competition truck called Kupcake Kart was following it about trying to hijack customers.

Events became more exciting when Clare Cosi opened a bag of imported coffee beans and found it stuffed with Brazilian crack. The main ruckus was the ongoing feud between the food trucks, and a vicious one it was.

Commuter stops on weekdays and festivals on weekends, and may the better truck win. There was a wedding reception catered by food trucks, the happy couple both being boors. The murder was not related to the crack but was a marital dispute.

Again a bountiful recipes appendix, including Hong Kong Egg Custard Tarts, as mentioned in the plot. The Nutella-Swirled Banana Muffins and the Orange Vanilla Coffee Cake will expand your waist in no time.



Pressed Hard

Coffee's
Weight
On
Old Age

When prominent people realize the injurious effects of coffee, and the change in health that Postum can bring, they are glad to lend their testimony for the benefit of others.

Mr. C. C. Wright, superintendent of public schools in North Carolina, says:—

"My mother, since her early childhood, was an inveterate coffee drinker, and had been troubled with her heart for a number of years, and complained of that 'weak all over' feeling and sick stomach.

"Some time ago I was making an official visit to a distant part of the country and took dinner with one of the merchants of the place. I noticed a somewhat peculiar flavor of the coffee, and asked him concerning it. He replied that it was Postum Food Coffee. I was so pleased with it that, after the meal was over, I bought a package to carry home with me, and had wife prepare some for the next meal; the whole family were so well pleased with it that we discontinued coffee and used Postum entirely.

"I had really been at times very anxious concerning my mother's condition, but we noticed that after using Postum for a short time, she felt so much better than she did prior to its use, and had little trouble with her heart and no sick stomach; that the headaches were not so frequent, and her general condition much improved. This continued until she was as well and hearty as the rest of us.

"I know Postum has benefited myself and the other members of the family, but not in so marked a degree as in the case of my mother, as she was a victim of long standing."

From THE
B L A C K
C A T
magazine,
1902
November

To give a break to the long-suffering city of New York, Cosi went to Washington, D.C., in *DEAD TO THE LAST DROP* (2015). She was doing several jobs there: house sitting in Georgetown, advising the Smithsonian on an exhibit about the history of coffee in the USA, catering to the White House (which obviously did not do a proper security check), and trying to set up and operate a branch store of Village Blend.

The complications piled up beyond belief. First Daughter Abby hung out at the shop on open-mike nights. A State Dept. employee collapsed and died there. Then Abby went missing, possibly a runaway bride but certainly a rebellious daughter. Cosi and her boyfriend Mike Quinn were caught up in a national security plot which played out as a spy adventure.

They were never too busy to talk coffee and food along the way. As an example, while they evading police and spies Chapter 15 began with them discussing the different methods of custom roasting coffee beans. The good news was that so many cops were in Cosi's shop that they attracted a surge of customers who figured it must be the good coffee that brought them in.

After all the alarums and excursions were over (it was a political conspiracy) and Abby lawfully married off, Cosi headed back to a quieter life in Manhattan. The recipes appendix was prefaced by a section on the Freedom of Information Act. I'm not certain why, given that all the baked goods listed seemed to have full disclosure in their lists of ingredients.

DEAD COLD BREW (2017) was the next installment. Clare Cosi was back in her Manhattan shop, engaged to Mike Quinn, and dealing with her annoying ex-husband Matt. The jeweler who set the coffee-coloured diamonds into the engagement ring was poisoned. A legacy of the wreck of the Andrea Doria reappeared as well, although not everyone realized it immediately.

In addition to all that, Cosi bid on a coffee supply contract for a new cruise ship. A policeman was shot in front of the coffee shop by a sniper. At the risk of being morbid, it must be noted that business was boosted for the shop as rubberneckers decided to have their coffee there.

The back stories all seemed to come from the past, with connections to the Andrea Doria, Italian vendettas, and just plain greed. In the hope of a kinder and better tomorrow, the recipes appendix offered up a variety of baked goods to go with all those specialty coffees.

SHOT IN THE DARK (2018) carried on. A smartphone app called Cinder compiled user ratings into a list of the best places for singles to meet. Village Blend was in the top three, so Clare Cosi and her staff were very busy. She was planning for her upcoming wedding, so she had a heavy workload indeed.

It got heavier when one of the dating app users was shot dead behind the shop. Nobody seemed to use the East River anymore as a dumping ground for bodies. Word on the street seemed to be that if a corpse needed disposal, head over to Village Blend and afterward go around to the front and get a nice latte.

The deceased was not a decent man and no one mourned for him. By now Cosi was better at investigating than NYPD Homicide. The world of dating apps was a nasty one, not just the users but the programmers. Cosi discovered a new way to be imperiled, in New York harbour.

After the hoorah died down and the final body count tallied, the appendix provided more coffee and baked goods recipes. One quibble: the Amish Cinnamon Apple Bread seemed out of place for Manhattan.

Chocolate And Fudge.

CHOCOLATE COVERED MURDER (2012) by Leslie Meier was a novel set in Tinker's Cove, Maine, a village that made Cabot Cove look a safe haven by comparison. The protagonist was Lucy Stone, food critic for the local newspaper. She was the resident Miss Marple, or Jessica Fletcher if you will.

For Valentine's Day, Stone was assigned to do a puff piece about Chanticleer Chocolate. The store manager was Tamzin Graves, a voluptuous woman who was considered a hussy by jealous village wives.

It wasn't entirely a surprise that she was the second corpse. Her nude body was found in the store, covered with chocolate. The first victim had been Max Fraser, who apparently drowned while ice fishing. He was wrapped in his fishing line with a metal lure jammed in his mouth.

Stone uncovered back stories but it wasn't easy. She had been trying to lose weight, not a good thing to do while spending time around people who cook for a living. Worse yet, Stone entered a desserts cooking contest, choosing blueberry cheesecake as her entry. Diet? What diet?

It all came down to a mix of blackmail, drug trafficking, and old relationships gone wrong, terminated with the held-at-gunpoint ploy. The chocolate shop had been used to trans-ship drugs: *It turned out that Chanticlear Chocolate's most popular flavors were heroin and OxyContin.*

THE CHOCOLATE CLOWN CAPER (2014) by JoAnna Carl (pseudonym of Eve Sandstrom) was a novel in a cozy series about Lee Woodyard, who operated the TenHuis Chocolate shop in the Lake Michigan village of Warner Pier. This was the 14th book in the series, so by now she was an experienced Miss Marple. It helped that her uncle was the police chief.

Moe Davidson operated Clowning Around, the store adjacent to the chocolate shop. Balloons, toys, that sort of thing, plus he performed at parties as a circus clown. A month after his murder, confessed to by a mentally-ill man, the widow Emma put the clown shop up for sale.

Woodyard wanted to buy it so she could expand her store. She found Emma unconscious in the Davidson shop. It appeared the murderer, the real murderer of Moe, had more business to transact.

Rather implausibly, the village was staging a winter festival called Clown Week. The streets were filled with people in grease paint and floppy shoes. Woodyard was churning out clown-shaped chocolates while she sleuthed.

The chapters were interspersed with sidebars on chocolate trivia and history. As an example, we learn that the Mayans used cacao beans as currency, a good idea because they could not be hoarded. The beans spoiled easily, so they either had to be consumed as chocolate or planted for more trees.

Pardon that digression. Getting back to the alarums and excursions, the final confrontation was a sled chase. Yes, the killer clown tried to escape down a long steep hill, coldly pursued by Woodyard and others on their sleds. The murderer had defrauded the Davidsons of big money for a non-existent children's clown school.

Stay away from Michigan islands as much as you would avoid a Maine fishing village. OH, FUDGE! (2017) by Nancy Coco (pseudonym of Nancy J. Parra) was a novel in a cozy series about Allie McMurphy, who inherited a hotel and fudge shop on Mackinac Island, Michigan.

Her cousin Victoria 'Tori' Andrews went into a huff about that and emigrated to California. Personally I think she was just getting away from the Michigan winters.

Andrews returned to the island, just in time to find the still-warm body of Barbara Smart, who had a trowel driven into her chest. That all happened in Chapter 1, which concluded with a recipe for California Fudge. There didn't seem much Californish about it, unless it was the chopped dried apricots.

Blood was thicker than fudge, as the blurb said, so McMurphy took up Marpleing on behalf of her cousin despite their disagreements. There followed a parade of family histories, smuggling conspiracies, damsels in distress, and fudge recipes. Smart had slept around with many married men, always a recipe for disaster. Enjoy the Salted Caramel Fudge while you can.

COOL CACHE (2008) by Patricia Smiley was a novel in a cozy series about Tucker Sinclair of Los Angeles, California, who was a business consultant specializing in helping small businesses (officially) and Marpleing (unofficially). Her assistant Eugene Barstok was a twit, there's no polite way to put it.

The novel got off to a brisk start at the chocolate shop Nectar, owned by Helen Taggart, who had hired Sinclair to help her over a shabby financial patch. Sinclair stopped by the store one night and found the cleaning lady's body. Next to the corpse of Lupe Ortiz was a green quetzal feather. Barstok decided he was going to be a sleuth himself, then failed to show up for work one day.

So it was heigh ho and aMarpleing Sinclair would go. Ortiz's son Roberto was a gang member and was promptly arrested for the murder. No cash had been taken from the store, nor any chocolate recipe books (valuable in the trade) or collectible decorations, some of which were antiques. Chocolates had been disappearing from stock, not a trivial expense since they were high-end nibbles. (Canadian readers: think Purdy's.)

An ancient Mayan chocolate pot was an object of interest. Roberto had been of interest as a suspect but not after he was killed in a drive-by shooting. The death toll increased and potential suspects died almost as soon as they were identified. The chocolate pot proved to be a genuine antiquity and the MacGuffin of the plot. The murderer wanted it for re-sale and didn't care how much blood he spilled.

Spice Was Not As Nice.

CURRIED AWAY (2016) by Gail Oust was a novel in a cozy series about Piper Prescott. She was proprietor of Spice It Up!, a shop in Brandywine Creek, Georgia. The victim de novel, if I may coin a phrase, was Sandy Granger, director at the local theatre. She had not been a people person, so motives were plentiful.

One of Prescott’s friends was among the suspects, so she went Marpleing, although truth be told her main concern was perfecting a recipe for chicken curry. Chapter 7 began with a brief interior monologue by Prescott, who wondered why the murder rate had soared in the village. There are none so blind, etcetera.

Lots of snooping and lots of local politics, as the mayor and the police chief were not on good terms. People drifted in and out of the spice shop, taking up lots of Prescott’s time, although few seemed to be paying customers. Quite frankly, one wonders at the economics of the shop. Hopefully the Internet sales were good.

The murderer was a local amateur actor who had been rejected by Granger for a role on the grounds that she couldn’t act. Neither could many Oscar winners, but that was then and this was now. After the denouement was over, it was on to the recipes appendix, where the Spicy Chicken Curry finally appeared, arrayed in all its glory. For dessert, the other two recipes were Cranberry Nut Mini-Muffins and Gingerbread.

Cheese.

THE LONG QUICHE GOODBYE (2010) by Avery Aames (pseudonym of Daryl Wood Gerber) was the first novel in a food cozy series about Charlotte Bessette, who opened a cheese shop and restaurant in Providence, Ohio. Formerly a peaceful village slumbering in the heartland, its crime rate was about to soar with the arrival of a Miss Marple.

The grand opening went well, other than someone using one of Bessette’s knives to stab Ed Woodhouse to death in front of the cheese shop. Her granny was the main suspect for all the usual reasons; she was found crouching with bloody hands over his corpse, and had been seen in public arguing with him.

Woodhouse was no innocent lamb either, being thoroughly detested by the village folk for numerous and justified reasons. One of the folk obviously decided that direct action was the only recourse.

It was good for the shop though, as Bessette mused to herself. *Who could imagine that a tale of murder would make for gawkers and curious shoppers? For days, the uptick in business had me, Matthew, and Rebecca hopping. Townsfolk who had never shown an interest in purchasing cheese before became frequent customers. More tourists arrived, from Cleveland, Columbus, Millersburg, and Akron. Reporters from as far away as Pennsylvania continued to arrive, hungry for a lurid story. Whoever couldn’t find a room at a local inn or bed-and-breakfast camped at nearby Nature Reserve beside Kindred Creek.*

Perhaps this is why villages tolerate Miss Marples. In exchange for sacrificing a few locals from time to time, the rest of the village could prosper from the gawker trade.

Meanwhile, back at the cheese shop, Bessette churned up back stories and melodramas, many involving her own family. In between selling gift baskets of cheese and serving piping hot quiches, she shortened the suspect list to an ex-girlfriend of Woodhouse. He done her wrong and that’s all there was to it.

On to the recipes appendix, beginning with Smoked Salmon And Mascarpone Risotto, then Ham And Pineapple Quiche, followed by Polenta With Taleggio And Basil. The final recipe was Peanut Butter Apple Pie Sandwich (with cheese and raisins).

Baking With Blood.

THE CAKE THERAPIST (2015) by Judith Fertig was a novel introducing Claire O’Neil, late of Brooklyn, New York, but now starting over as a bakery owner back in her hometown of Millcreek Valley, Ohio. She had synesthesia and perceived flavours as emotions. Pomegranate made her homesick, plum made her pleased with herself, orange was a wake-up call, and cinnamon brought back old memories.

Millcreek Valley was a themed village, specializing in shops for brides. Every aspects of a wedding was catered for, and O’Neil was hoping to get the wedding cake orders. The opening chapters spent a lot of pages gushing about food flavours, so make certain you read this book on a full stomach.

There were a lot of flashback stories that eventually connected to the modern O’Neil family. A woman was assaulted and the culprit escaped. He was brought in not by Marpleing but by police pinging his cellphone for his location. It is rare for cozies to acknowledge the modern age, as usually they are about ten years behind in technology.

Even when they do acknowledge cellphones, Miss Marple never recharged her phone overnight like the rest of the world or else she left it at home when she went out driving, thereby negating the whole point of having a cellphone. No one ever checked their voicemail, texts, or emails in a crisis, otherwise that would cut out about twenty pages from the novel.

In a separate subplot, a jewel thief was connected to the back stories, and also brought to justice. The novel ended with O’Neil and friends enjoying a hearty meal of chili dogs. Talk about a twist ending.

ANOTHER ONE BITES THE CRUST (2018) by Ellie Alexander (pseudonym of Kate Dyer-Seeley) was a novel in a cozy series about Juliet Capshaw of Ashland, Oregon. Her family operated Torte, a combination bakery and restaurant. Ashland was celebrating its annual Shakespeare Festival. Torte had the contract to supply Elizabethan-era treats. The novel was slow in starting, as Capshaw and her staff constantly gushed about recipes, none of which were Elizabethan.

As anyone knows who has been involved in stage theatre, there is usually more drama backstage than in front of the curtain. The artistic director Lance (no last name ever given) got into a public spat with a self-important wannabe actor named Antony. The next morning Antony was found dead, with a dagger before him.

Antony was exposed as John Duncan, who had a past with another member of the theatre company. One tried to blackmail the other, who then reversed the tables and got himself silenced permanently.

The novel alternated between sleuthing and extended scenes in the bakery, whose staff were really committed to good food and talking endlessly about it. There was so much chatter about recipes that the appendix seemed unnecessary. The recipes appendix did not include any Elizabethan food. I doubt that Shakespeare ever ate Coconut Cream Pie, Chicken Tortilla Soup, Avocado Wraps, Carrot Cake, or Doughnut Latte.

Sit-Down Restaurants.

EAT, DRINK, AND BE BURIED (2001) by Peter King was a novel in a series about the Gourmet Detective. His name was never given. His occupation was advising restaurants and hotels about their menus, but wherever he went he left behind a pile of corpses. Interpol never seemed to pick up on him.

His current contract was advising a British aristocratic family about their menus for castle guests and medieval banquets. Their castle was being revamped as a medieval hostelry, with jousts and food in ye olde style but with better sanitation.

A jouster died from poisoned food. He had been a last-minute substitute for someone else, so the question arose as to who was the intended target. It might have been poison in the venison with frumenty. Perhaps a son of the family had been the intended target.

Sir Gerald hired the Gourmet Detective to investigate, bearing in mind that the original contract still had to be fulfilled. Designing a medieval menu was not as easy as it seemed. Food back then was terrible even for nobility. It was generally partly spoiled, poorly prepared, and sent many eaters to early graves.

The Gourmet Detective had to adapt the food to modern conditions. Since meat was usually past its prime back then, heavy spices were used. Today spicing and sauces are much lighter and the meat far safer. The vegetables today are less likely to give you dysentery.

There were alarums along the way in the dungeons, arrows flying about, plus the occasional bullet. The death toll rose. The J’accuse! meeting was held in the dungeon. Several culprits were exposed. Some were trying to prune the family tree to speed up their inheritance, while others wanted to redevelop the estate in tackier style. It happens in the best of families.

MURDER AND MARINARA (2013) by Rosie Genova (pseudonym of Rosemary DiBattista) was the first novel in a cozy series about Victoria Rienzi, a novelist whose day job was working in Casa Lido, her family’s restaurant in Oceanside Park, New Jersey. The townsfolk were in an uproar about a reality television show that would give viewers the wrong impression about life on the Jersey shore. Never happen in real life, of course.

The producer Gio Parisi was a nasty man, not above blackmail and threats. He died suddenly after a hearty meal at Casa Lido, the publicity of which, needless to say, destroyed its trade. Rienzi, having written mystery novels, was therefore the obvious Miss Marple to attempt saving her family.

There were plenty of suspects. Parisi exploited his staff and the actors on his reality show. His personal life was no better, leading a woman scorned to spike his tea with digitalis at the restaurant. From there to the recipes appendix. No tea recipes fortunately, just Marinara Sauce, Basil Walnut Pesto, and Frittata With Arugula.

A DISH BEST SERVED COLD (2015) had Casa Lido celebrating its 70th anniversary just as a hurricane took aim at the Jersey shore. An old friend Pete Petrocelli stopped by the restaurant. He got to talking about a relative who had mysteriously disappeared years ago back in Italy. he suggested the story to Victoria Rienzi as a plot for her next mystery novel.

The hurricane slammed through. As it passed, so did Petrocelli, whose body was found when the storm died away. Rienzi began not so much Marpleing as genealogical research, to find the details of Petrocelli's story. There were connections in the Rienzi family she never knew existed.

Mafia connections showed up, as did present-day capos who didn't care to have all the dirty laundry of the Family aired out. There were some unfinished items on the agenda. Rienzi drew attention to them, which some preferred she didn't. Petrocelli may or may not have been murdered to keep him from blabbing, depending on how his final moments were interpreted. After that, the appendix with a few recipes for sauces and dressings.

FOGGED INN (2016) by Barbara Ross was a novel in a cozy series about Julia Snowden of Busman's Harbor, Maine. Yes, that blood-soaked coast where Miss Marples from one end to the other of the state have decimated the populations of seaside villages. (I use decimated in its correct sense, killing 10% of the population.)

The Snowden family operated a clambake catering company in the summer, but during the off-season Julia worked at a local restaurant. She didn't find the body in the walk-in refrigerator but her boss did. Being the resident Miss Marple, it was upon her shoulders that the sleuthing fell. And the police of course, but the reader will know even before opening the book who will win the

race to identify the murderer. Lots of back stories but the main theme was someone seeking revenge for a death years ago. Convoluted, but the plot came down to the adage that revenge is a dish best served cold.

The recipes appendix began with Split Pea Soup, which I gather Maine denizens are weaned onto as infants. Stuffed Chicken Breast followed. Roasted Hake Loin surprised me because I didn't know fish had loins.

A DEATH AT THE YOGA CAFÉ (2017) by Michelle Kelly was a novel in a cozy series about Keeley Carpenter of Belfrey, England. She operated a combination yoga studio and vegetarian café.

The annual Arts Festival was happening and Carpenter had a booth. It was adjacent to her rival Raquel Philips, who operated an English cuisine restaurant, pardon the oxymoron. Philips' boyfriend was the village mayor Gerald Buxby, who didn't survive past Chapter 2.

Carpenter didn't much like Philips but did enjoy Marpleing. The café was Gossip Central in the village. She collected a fair amount of information just standing behind the counter. Carpenter was distracted by a visit from her mother, they not being on the best of terms. As a Miss Marple she tended to antagonize many of those she interrogated, on one occasion requiring the intervention of the police to break up a screaming match.

The murderer was acting out family problems from decades ago when his illegitimate sister died. He blamed it on her father, His Honour himself. He almost got Carpenter for being an interfering busybody. She was wanted for the next book in the series and therefore survived.

The recipes appendix was meatless, although not vegetarian since cheese and milk were frequent ingredients. First was Summer Fruit Smoothie, Summer Stew (no meat, just squash and sweet potato), Goat's Cheese Tart With Lemon And Walnut, and Red Pepper, Spinach, And Potato Omelet.

DANDELION DEAD (2016) by Chrystle Fiedler was a cozy novel in a series about Willow McQuade and her ex-cop boyfriend Jackson Spade, of Long Island, New York. She was the proprietor of Nature's Way Market and Café. Don't try to order a bacon burger as you'll have to settle for the dandelion quiche. The book was permeated with infodumps on natural foods in between the sleuthing.

McQuade’s old boyfriend Simon Lewis and winemakers David and Ivy Farmer owned the Pure vineyard, which bragged about being organic. They asked McQuade to cater their party for the kick-off of the local wine festival. The event culminated in a \$200,000 prize from a wine magazine for best new wine.

Ivy’s twin sister Amy was poisoned, probably by the herbal salad rather than the wine. The question was if it had been meant for Ivy. McQuade’s honour was at stake, so she went Marpleing. The killer might have been a rival vintner, but there were also old romantic escapades, bad blood from events past and present, and other melodramas.

Another murder spiced up the plot before the finale. It wasn’t Amy who was dead, it was Ivy. Her evil twin sister wanted the Pure vineyard and family fortune. She pled insanity at the trial. McQuade and Spade were married in the final few paragraphs, which meant that she was now Willow McQuade-Spade. Say that out loud a couple of times.

Food Trucks.

WONTON TERROR (2019) by Vivien Chien was a novel in a food cozy series about Lana Lee of Cleveland, Ohio, whose family operated the Ho-Lee Noodle House restaurant. The Asian Night Market festival was underway, which included food trucks. Among the trucks was Wonton On Wheels, owned by Sandra and Ronnie Chow, friends of the Lee family.

When the truck blew up, the suspicion was murder, not accident. Lee, helped by her boyfriend Police Detective Adam Trudeau, went Marpleing for back stories and gossip. Both the Chow and Lee families had their troubles. Since Lee was only a waitress for her family restaurant, she had more time for snooping.

The murderer was embroiled with the Chow family and wanted to teach one of them a lesson, inadvertently killing him. Matters were complicated by a second culprit taking advantage of the situation, including another bomb.

It all ended well, with Lee surviving the final confrontation, which was to be expected since this was a series and she would be needed for the next book. Wonton On Wheels was rebuilt, and it was back to the food truck business. Keep a close eye on those propane tanks.

FUTURE HISTORIES

by Dale Speirs

Future history is fiction that extrapolates current trends or possibilities into the near future. Not too far ahead, as that would make it science fiction. Future history is seldom meant as prediction but often as a cautionary tale.

Invasions.

THE SWOOP! OR, HOW CLARENCE SAVED ENGLAND was a 1909 novella by P.G. Wodehouse, now reprinted by Wildside Press in book form with large fonts and wide line spacing to make it seem like a novel. I have the Bertie Wooster stories in an omnibus set of five volumes (reviewed in issue #365 of this zine) but didn’t know about this one.

The premise was that in the first decade of the 1900s, nine countries simultaneously invaded Britain. The Brits hardly noticed, as it was the height of the cricket season. This I can understand. Canada during the Stanley Cup finals, or the USA during the football bowl playoffs, would take a day or two for the general public to be aware of barbarians at their gates.

Britain, as it usually was, lay open, unprepared to deal with the situation. They reacted with decisiveness. Angry letters were written to the editors of newspapers. London was bombarded, but it was August, so nobody of any importance was in town. They were all out at their country places.

The nine armies began quarreling with each other, not to mention trying to work their way through the maze of city streets and one-lane rural tracks. It all ended well for the Brits, as the bloodmindedness of the simple folk was enough to stymie the invaders. A funny book.

“The Great Invasion Of 1955” by J. David Reid (1932 October, AMAZING STORIES, available as a free pdf from www.archive.org) was a plot by the Japanese to invade North America. They had a new metal alloy with which to build super airplanes that would outclass anything the Americans had.

After pausing to invent helicopters, the American heroes developed a method to destroy the invading air armada. Nine years later, there was another air armada. Different outcome, of course. The story is reasonably prescient about how the Japanese might behave.

CORVIDS

by Dale Speirs

The Corvidae are the bird family of crows, ravens, magpies, and jays. They are among animals that not only tolerate humans but thrive in urban areas. In Calgary, the most common bird is undoubtedly the magpie, perhaps tied with English sparrows.

In my residential neighbourhood there are probably a half-dozen magpies per city block. I occasionally see crows but they seem to prefer the natural parks. Ravens are scarce and I might see one bird every second year. Every morning when I step out of my house, there is at least one magpie hopping about the lawn or cawing at me from the big spruce tree in the front yard.

Which brings me to a book I bought at the When Words Collide 2019 dealer bourse, CORVIDAE, an anthology edited by Rhonda Parrish. I don't have to tell you the theme of the stories. Most rely on fantasy based on Nordic or aboriginal legends, and sometimes academic politics.

The stories generally rely on the trickster trope commonly associated with corvids. Societies around the world have noted the intelligence and cleverness of corvids. The fiction in this book tends to be repetitious if read through all at once. Characters are pursued or become obsessed by crows or ravens. Much squawking and cawing before a depressing ending.

The writing is mostly Canlitcrit, taught in universities to creative writing classes. It is the kind of fiction that is published once by small presses and then never seen again. The stories end in despair, or are unresolved, or are zero reset.

The writers don't understand that just because Edgar Allan Poe pulled off a perfect story about a raven haunting him, they can't update or revise it with an angst-ridden rewrite involving Nordic or aboriginal gods. The stories in this anthology should be read at intervals, one or two at a time, so as not to bore the reader with variations on a theme.

At right: Electrical box in northwest Calgary on Nose Hill Drive.



In OPUNTIA #22, I summarized what was known of Nils Helmer Frome, the earliest Canadian science fiction fan. He corresponded with Lovecraft and published the first Canadian SF fanzine. Recently while working my way through the pdfs of old prozines available at www.archive.org, I came across this letter in the 1937 February issue of AMAZING STORIES (pages 141 and 142).

Abstracte Fantasies Treated by a Young Man
Editor, AMAZING STORIES:

Crazy cranks, critics, fans and last and positively most, Editor, listen intently while I further graciously seem to enlighten the populace of the twentieth century. I think I have found a new and more destructive objection to the possibility of time travel. I think many an author saw this, but didn't bring it up, for fear it would endanger the plausibility of his plot. But I bring it into the open now—Two things cannot exist in space at one time—a physical law. It means that one chair can't stand where another chair stands at the same time. That means that the molecules, the atoms, the protons and electrons can't exist inside others of the same that compose the other chair. You, if you could creep into tomorrow, couldn't get there and live, nor could you get there with a whole electron left—there is an atmosphere tomorrow as well as today—unless you think the world ends tomorrow. And you would be attempting to occupy space that is already filled by either solid or gases. Even if you got there safely, you couldn't move; you, belonging in the past,

could not influence any matter to move, because it never did move anyway, that argument would be worked better about the past. How can you go into the future when you can't emerge in a live world out of time and live? Either by suspended animation (in which progress is already taking place) or by emerging in a perfect vacuum and only being an onlooker. But vacuum left, I think, by the body removed into time, would have a tendency to draw back that body into its original space.

I would be glad to correspond with persons anywhere. Preferably those near my age, 17. Especially those interested in art and writing fantastic fiction. And certainly none not interested extremely in science fiction, and, of course in science. For those interested, I have some old science fiction magazines I will sell.

NILS HELMER FROME,
Fraser Mills, Box 3,
B. C., Canada

(This letter must speak for itself; it rather passes our comprehension. The going into the future has been a basis for a number of excellent stories, but it is to be hoped that no one believes in the possibility of such migrations. We cannot see the need of finding a new and more destructive objection to the possibility of time travel. Of course it is impossible, but it gives a good basis for science-fiction stories.—EDITOR.)

THE RECENT EVOLUTION OF CALGARY
photos by NASA, from the International Space Station

Occasionally the ISS overflies Calgary at night and the astronauts take a good photo of it. What is interesting is to compare the evolution of the city over the past decade. This photo was taken on 2013-02-12, and I have annotated it with landmarks.

Nose Hill is a large grasslands natural park. The airport is the black area on the northeast corner of the city. The blob of white light in its centre are the terminal buildings. This photo shows the Stoney Trail ring road under construction along the east side of the city. The photos on the next page show its completion.

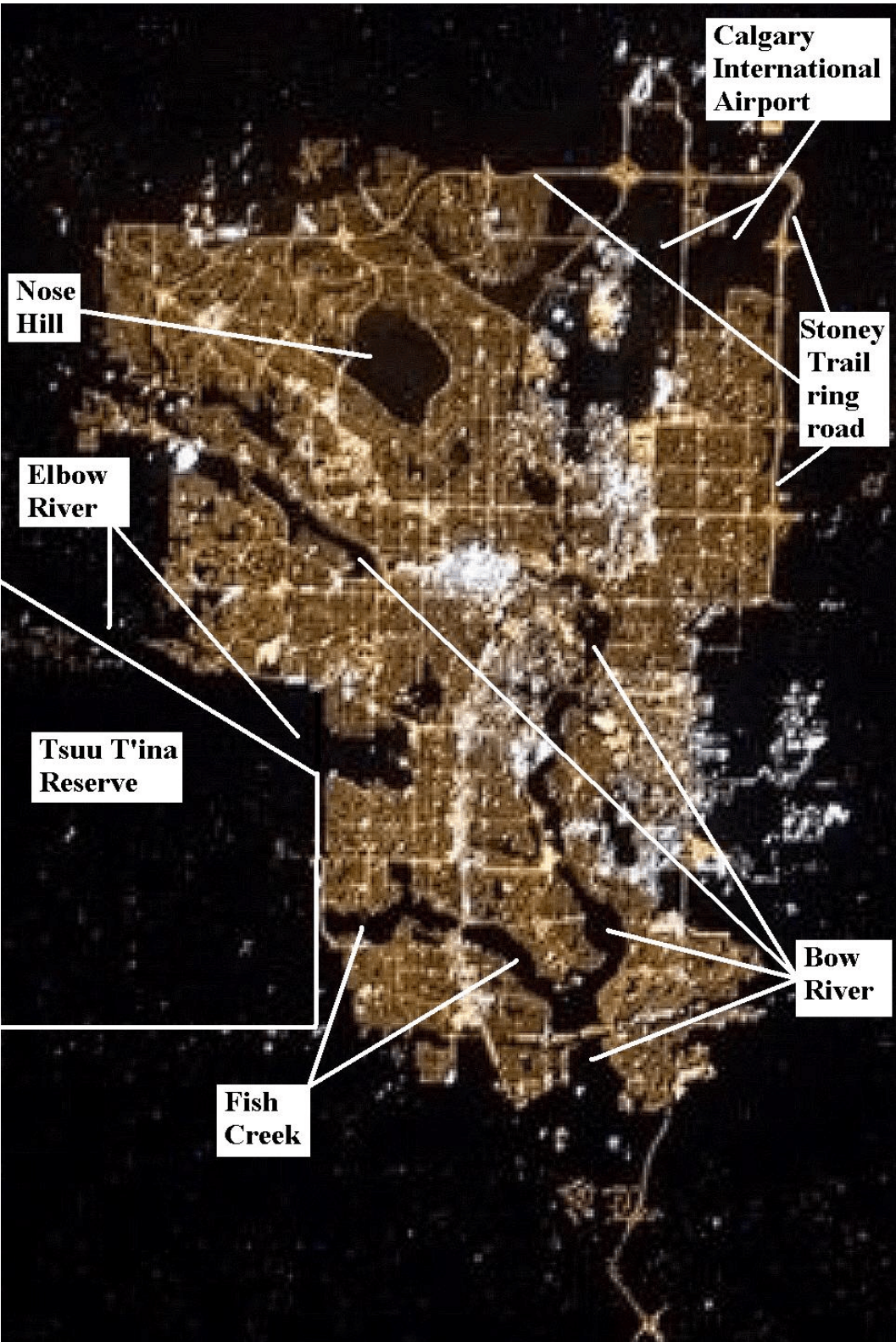
The white blob in the centre of the city is the downtown core, which was where the pioneer village was located when Calgary was founded in 1875. Fort Calgary was built at the junction of the Bow and Elbow Rivers but the city lights wash them out in this photo in the inner city.

The aboriginal tribes of southern Alberta signed Treaty 7 in 1877. At that time the Tsuu T'ina Reserve was about 20 km southwest of the village, but now the city has sprawled around it. Most of the tribe live at the west end of the Reserve out in the mountains, which is why it is so dark in this photo.

Fish Creek is the only provincial park in Alberta surrounded by a city. It was for decades the southern boundary until the developers jumped over it.

The bright white vertical line running up from the bottom of the photo, cutting through Fish Creek and terminating in the core, is Macleod Trail. This was the original cattle trail from southern Alberta to the packing plants in Calgary, which was how the city got its nickname of Cowtown.

When this photo was taken, most of the city was illuminated by sodium streetlights, which glow orange-yellow. The white lights are LEDs, which saved so much electricity that the city began converting full speed. You'll see that in the next two photos.



This photo was taken from the ISS on 2015-11-28. Notice the ring road was completed on the northwest, north, east, and south sides.



This photo was taken on 2020-01-06. The conversion to LED streetlights was almost complete. Very little orange left.



SEEN AROUND COWTOWN
photos by Dale Speirs

Below: In early January, the New Central Library had an exhibition by a local artist of landscapes of the mountains adjacent to Calgary, which were well done. There was a note that the artist accepted commissions to paint pets. Having read that, I turned the corner of the frames and was presented with the view below. I won't embarrass the artist by mentioning her name. She has to make a living like everyone else. What I can't believe is that someone will actually hang these paintings on their wall.

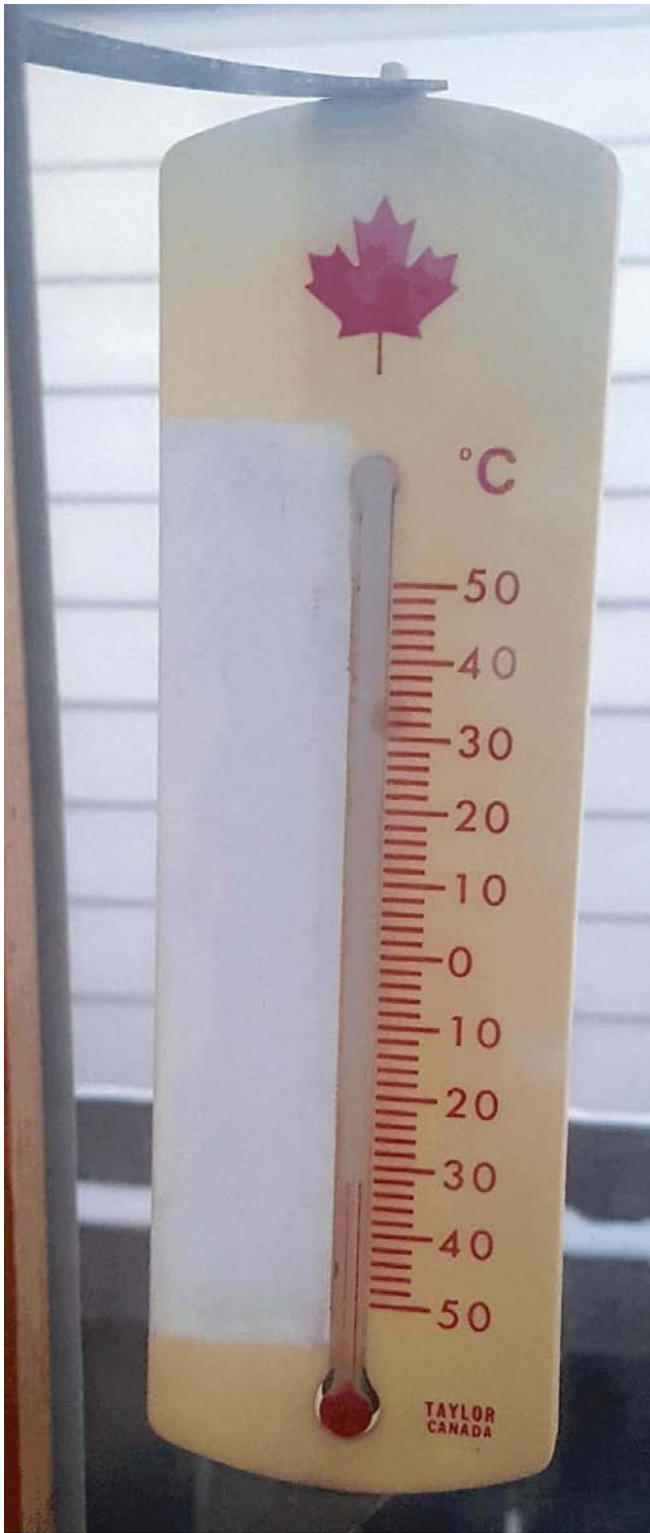
Upper right: Selling candy in a drug store for diabetes research. Sort of like a liquor store donating a dollar from each bottle to the Alcoholics Anonymous. (A toonie is a \$2 coin; there are no banknotes in Canada smaller than \$5.)

Bottom right: Photo taken in 2019 September. Praise the Lord and pass the cement bags.



Seen around my driveway. As mentioned at the beginning of this issue, Alberta had a week of -30°C temperatures. The thermometer photo was taken January 15 at 08h30. It is on my kitchen window on the north side of the house.

All Canadian cars are equipped with electrical engine block heaters. They are plugged into an extension cord from an outside electrical outlet of a house. The Opuntiamobile is shown here plugged in for the night. It is also the custom in Canada to lift the windshield wipers so they don't freeze to the glass. After unplugging the car the next morning, I took the photo at bottom to show the extension cord frozen stiff as a board.



SEEN IN THE LITERATURE

Atri, D. (2020) **Stellar proton event-induced surface radiation dose as a constraint on the habitability of terrestrial exoplanets.** MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY: LETTERS 492:doi.org/10.1093/mnrasl/slz166

Author’s abstract: *The discovery of terrestrial exoplanets orbiting in habitable zones around nearby stars has been one of the significant developments in modern astronomy. More than a dozen such planets, like Proxima Centauri b and TRAPPIST-1 e, are in close-in configurations and their proximity to the host star makes them highly sensitive to stellar activity.*

Episodic events such as flares have the potential to cause severe damage to close-in planets, adversely impacting their habitability. Flares on fast-rotating young M stars occur up to 100 times more frequently than on G-type stars, which makes their planets even more susceptible to stellar activity. Stellar energetic particles emanating from stellar proton events (SPEs) cause atmospheric damage (erosion and photochemical changes), and produce secondary particles, which in turn results in enhanced radiation dosage on planetary surfaces.

We explore the role of SPEs and planetary factors in determining planetary surface radiation doses. These factors include SPE fluence and spectra, and planetary column density and magnetic field strength. Taking particle spectra from 70 major solar events (observed between 1956 and 2012) as proxy, we use the GEANT4 Monte Carlo model to simulate SPE interactions with exoplanetary atmospheres, and we compute surface radiation dose. We demonstrate that in addition to fluence, SPE spectrum is also a crucial factor in determining the surface radiation dose.

SPEs can abruptly enhance radiation dose on planetary surfaces and have the capability to disrupt potentially habitable conditions on planets. We have demonstrated that radiation dose varies significantly with charged particle spectra, and an event of a given fluence can have a drastically different effect depending on the spectrum.

Our results show that radiation dose can vary by about 5 orders of magnitude for a given fluence. In terms of shielding, we found that atmospheric depth (column density) is a major factor in determining radiation dose on the

planetary surface. Radiation dose is reduced by 3 orders of magnitude corresponding to an increase in the atmospheric depth by an order of magnitude.

We found that the planetary magnetic field is an important but a less significant factor compared to atmospheric depth. The dose is reduced by a factor of about 30 corresponding to an increase in the magnetospheric strength by an order of magnitude. However, it should be noted that planetary magnetic field is crucial in maintaining a substantial atmosphere on a planet.

Mighani, S., et al (2020) **The end of the lunar dynamo.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aax0883

Authors’ abstract: *Magnetic measurements of the lunar crust and Apollo samples indicate that the Moon generated a dynamo magnetic field lasting from at least 4.2 until <2.5 billion years (Ga) ago. However, it has been unclear when the dynamo ceased.*

Here, we report paleomagnetic and ⁴⁰Ar/³⁹Ar studies showing that two lunar breccias cooled in a near-zero magnetic field (<0.1 ?T) at 0.44 ± 0.01 and 0.91 ± 0.11 Ga ago, respectively. Combined with previous paleointensity estimates, this indicates that the lunar dynamo likely ceased sometime between ~1.92 and ~0.80 Ga ago. The protracted lifetime of the lunar magnetic field indicates that the late dynamo was likely powered by crystallization of the lunar core.

The intensity of the present-day magnetic field across much of the lunar surface is <0.2 nT, indicating that the Moon currently does not have a global magnetic field. However, paleomagnetic measurements of Apollo samples indicate that the Moon once generated a core dynamo with surface field intensities of several tens of microtesla (comparable to that of Earth today) during the period 4.25 to 3.56 billion years (Ga) ago.

Following this high-field epoch, the field declined by at least an order of magnitude by 3.2 Ga ago and persisted in a weakened state (~5 ?T) until at least 2.5 Ga ago. It has been unknown how long the dynamo persisted beyond this time. The youngest lunar paleointensity constraint is an upper limit of 7 ?T at <7 million years (Ma) ago provided by an impact glass splash.

Clement, M.S., et al (2020) **A record of the final phase of giant planet migration fossilized in the asteroid belt's orbital structure.** MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY: LETTERS 492:doi.org/10.1093/mnrasl/slz184

Authors' abstract: *The asteroid belt is characterized by an extreme low total mass of material on dynamically excited orbits. The Nice model explains many peculiar qualities of the Solar system, including the belt's excited state, by invoking an orbital instability between the outer planets. However, previous studies of the Nice model's effect on the belt's structure struggle to reproduce the innermost asteroids' orbital inclination distribution.*

Here, we show how the final phase of giant planet migration sculpts the asteroid belt, in particular its inclination distribution. As interactions with leftover planetesimals cause Saturn to move away from Jupiter, its rate of orbital precession slows as the two planets' mutual interactions weaken. When the planets approach their modern separation, where Jupiter completes just short of five orbits for every two of Saturn's, Jupiter's eccentric forcing on Saturn strengthens.

We use numerical simulations to show that the absence of asteroids with orbits that precess between 24 and 28 arcsec yr⁻¹ is related to the inclination problem. As Saturn's precession speeds back up, high inclination asteroids are excited onto planet crossing orbits and removed from the inner main belt. Through this process, the asteroid belt's orbital structure is reshaped, leading to markedly improved simulation outcomes.

Filiberto, J., et al (2020) **Present-day volcanism on Venus as evidenced from weathering rates of olivine.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aax7445

Authors' abstract: *At least some of Venus' lava flows are thought to be <2.5 million years old based on visible to near-infrared (VNIR) emissivity measured by the Venus Express spacecraft. However, the exact ages of these flows are poorly constrained because the rate at which olivine alters at Venus surface conditions, and how that alteration affects VNIR spectra, remains unknown.*

We obtained VNIR reflectance spectra of natural olivine that was altered and oxidized in the laboratory. We show that olivine becomes coated, within days,

with alteration products, primarily hematite (Fe₂O₃). With increasing alteration, the VNIR 1000-nm absorption, characteristic of olivine, also weakens within days.

Our results indicate that lava flows lacking VNIR features due to hematite are no more than several years old. Therefore, Venus is volcanically active now.

Huppert, K.L., et al (2020) **Hotspot swells and the lifespan of volcanic ocean islands.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaw6906

Authors' abstract: *Volcanic ocean islands generally form on swells, seafloor that is shallower than expected for its age over areas hundreds to more than a thousand kilometers wide, and ultimately subside to form atolls and guyots (flat topped seamounts). The mechanisms of island drowning remain enigmatic, however, and the subaerial lifespan of volcanic islands varies widely.*

We examine swell bathymetry and island drowning at 14 hotspots and find a correspondence between island lifespan and residence time atop swell bathymetry, implying that islands drown as tectonic plate motion transports them past mantle sources of swell uplift.

This correspondence argues strongly for dynamic uplift of the lithosphere at ocean hotspots. Our results also explain global variations in island lifespan, which influence island topography, biodiversity, and climate.

Tonera, J.D., and D.C. Catling (2020) **A carbonate-rich lake solution to the phosphate problem of the origin of life.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:883-888

Authors' abstract: *Phosphate is central to the origin of life because it is a key component of nucleotides in genetic molecules, phospholipid cell membranes, and energy transfer molecules such as adenosine triphosphate. To incorporate phosphate into biomolecules, prebiotic experiments commonly use molar phosphate concentrations to overcome phosphate's poor reactivity with organics in water.*

However, phosphate is generally limited to micromolar levels in the environment because it precipitates with calcium as low solubility apatite

minerals. This disparity between laboratory conditions and environmental constraints is an enigma known as the phosphate problem.

Here we show that carbonate-rich lakes are a marked exception to phosphate-poor natural waters. In principle, modern carbonate-rich lakes could accumulate up to ~0.1 molal phosphate under steady-state conditions of evaporation and stream inflow because calcium is sequestered into carbonate minerals. This prevents the loss of dissolved phosphate to apatite precipitation.

Even higher phosphate concentrations (>1 molal) can form during evaporation in the absence of inflows. On the prebiotic Earth, carbonate-rich lakes were likely abundant and phosphate-rich relative to the present day because of the lack of microbial phosphate sinks and enhanced chemical weathering of phosphate minerals under relatively CO₂-rich atmospheres. Furthermore, the prevailing CO₂ conditions would have buffered phosphate-rich brines to moderate pH (pH 6.5 to 9).

The accumulation of phosphate and other prebiotic reagents at concentration and pH levels relevant to experimental prebiotic syntheses of key biomolecules is a compelling reason to consider carbonate-rich lakes as plausible settings for the origin of life.

Woodward, H.N., et al (2020) **Growing up Tyrannosaurus rex: Osteohistology refutes the pygmy Nanotyrannus and supports ontogenetic niche partitioning in juvenile Tyrannosaurus.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aax6250

Authors' abstract: Despite its iconic status as the king of dinosaurs, Tyrannosaurus rex biology is incompletely understood. Here, we examine femur and tibia bone microstructure from two half-grown T. rex specimens, permitting the assessments of age, growth rate, and maturity necessary for investigating the early life history of this giant theropod.

Osteohistology reveals these were immature individuals 13 to 15 years of age, exhibiting growth rates similar to extant birds and mammals, and that annual growth was dependent on resource abundance. Together, our results support the synonymization of Nanotyrannus into Tyrannosaurus and fail to support the hypothesized presence of a sympatric tyrannosaurid species of markedly smaller adult body size.

Our independent data contribute to mounting evidence for a rapid shift in body size associated with ontogenetic niche partitioning late in T. rex ontogeny and suggest that this species singularly exploited mid- to large-sized theropod niches at the end of the Cretaceous.

Rezende, E.L., et al (2020) **Shrinking dinosaurs and the evolution of endothermy in birds.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaw4486

[Endothermy is warm-blooded metabolism with body heat generated inside an animal by its metabolism.]

Authors' abstract: The evolution of endothermy represents a major transition in vertebrate history, yet how and why endothermy evolved in birds and mammals remains controversial. Here, we combine a heat transfer model with theropod body size data to reconstruct the evolution of metabolic rates along the bird stem lineage.

Results suggest that a reduction in size constitutes the path of least resistance for endothermy to evolve, maximizing thermal niche expansion while obviating the costs of elevated energy requirements. In this scenario, metabolism would have increased with the miniaturization observed in the Early-Middle Jurassic (~180 to 170 million years ago), resulting in a gradient of metabolic levels in the theropod phylogeny.

Whereas basal theropods would exhibit lower metabolic rates, more recent non-avian lineages were likely decent thermoregulators with elevated metabolism. These analyses provide a tentative temporal sequence of the key evolutionary transitions that resulted in the emergence of small, endothermic, feathered flying dinosaurs.

The evolution of endothermy in birds and mammals is regarded as one of the most important transitions in vertebrate evolution, providing an extraordinary case of evolutionary convergence between these groups that was pivotal to their widespread geographic distribution and ecological success.

While several groups of invertebrates and vertebrates can raise their temperatures above ambient, the maintenance of high and constant body temperature through endogenous heat production at rest is exclusive to birds

and mammals and explains their greater mobility, stamina, and tolerance to a wider range of conditions.

Lu, K.J., et al (2020) **Evolution of vascular plants through redeployment of ancient developmental regulators.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:733-740

[Vascular plants are those with circulatory systems called xylem and phloem, equivalent to animal veins and arteries. All land plants have vascular systems, not only to circulate water and nutrients but for structural support. For example, wood is old xylem tissue.]

Authors' abstract: *Vascular plants contribute to most of the food and feed production on earth and deliver heating and construction materials in the form of wood. Yet, we know very little about how nonvascular plants acquired vascular tissues during evolution.*

Here, we provide molecular insights into how two evolutionarily conserved transcription factors were redeployed to control proliferation of vascular cells. This is an example of a developmental regulator for which the innovations leading to a vascular function are clearly correlated with the emergence of vascular plants.

Thus, while cell division alone is likely not the only driver, it might have been an important evolutionary innovation enabling the emergence of vascular plants.

Vascular plants provide most of the biomass, food, and feed on earth, yet the molecular innovations that led to the evolution of their conductive tissues are unknown. Here, we reveal the evolutionary trajectory for the heterodimeric TMO5/LHW transcription factor complex, which is rate-limiting for vascular cell proliferation in Arabidopsis thaliana.

Both regulators have origins predating vascular tissue emergence, and even terrestrialization. We further show that TMO5 evolved its modern function, including dimerization with LHW, at the origin of land plants.

A second innovation in LHW, coinciding with vascular plant emergence, conditioned obligate heterodimerization and generated the critical function in

vascular development in Arabidopsis. In summary, our results suggest that the division potential of vascular cells may have been an important factor contributing to the evolution of vascular plants.

Speirs: In other words, genes that were common in non-vascular plants, such as sea algae, were reactivated at a different stage in land plant life cycles to produce conducting cells of xylem and phloem.

Zhang, L., et al (2020) **The water lily genome and the early evolution of flowering plants.** NATURE 577:doi.org/10.1038/s41586-019-1852-5

[Angiosperms are the flowering plants. They originated in the middle Cretaceous as dinosaurs were reaching their peak but didn't become the planet's major plant group until after the asteroid. Water lilies and magnolias are the most primitive types of angiosperms.]

Authors' abstract: *Water lilies belong to the angiosperm order Nymphaeales. Amborellales, Nymphaeales, and Austrobaileyales together form the so-called ANA-grade of angiosperms, which are extant representatives of lineages that diverged the earliest from the lineage leading to the extant mesangiosperms.*

Here we report the 409-megabase genome sequence of the blue-petal water lily (Nymphaea colorata). Our phylogenomic analyses support Amborellales and Nymphaeales as successive sister lineages to all other extant angiosperms.

Water lilies have evolved attractive floral scents and colours, which are features shared with mesangiosperms, and we identified their putative biosynthetic genes in N. colorata. The chemical compounds and biosynthetic genes behind floral scents suggest that they have evolved in parallel to those in mesangiosperms. Because of its unique phylogenetic position, the N. colorata genome sheds light on the early evolution of angiosperms.

Lyson, T.R., et al (2019) **Exceptional continental record of biotic recovery after the Cretaceous-Paleogene mass extinction.** SCIENCE 366:977-983

Authors' abstract: *The extinction that occurred at the end of the Cretaceous period is best known as the end of the nonavian dinosaurs. In theory, this paved the way for the expansion of mammals as well as other taxa, including plants.*

We describe a new record from the Cretaceous-Paleogene (KPgE) in Colorado that includes unusually complete vertebrate and plant fossils that describe this event in detail, including the recovery and expansion of mammalian body size and increasing plant and animal biotic diversity within the first million years.

We report a time-calibrated stratigraphic section in Colorado that contains unusually complete fossils of mammals, reptiles, and plants and elucidates the drivers and tempo of biotic recovery during the poorly known first million years after the Cretaceous-Paleogene mass extinction (KPgE).

Within ~100 thousand years (ka) post-KPgE, mammalian taxonomic richness doubled, and maximum mammalian body mass increased to near pre-KPgE levels.

A threefold increase in maximum mammalian body mass and dietary niche specialization occurred at ~300 ka post-KPgE, concomitant with increased megafloal standing species richness. The appearance of additional large mammals occurred by ~700 ka post-KPgE, coincident with the first appearance of Leguminosae (the bean family).

These concurrent plant and mammal originations and body-mass shifts coincide with warming intervals, suggesting that climate influenced post-KPgE biotic recovery.

Whitewoods, C.D., et al (2020) Evolution of carnivorous traps from planar leaves through simple shifts in gene expression. SCIENCE 367:91-96

*Authors' abstract: The cup-shaped leaves of carnivorous plants have evolved multiple times from ancestors with flat leaves. Studying development of the carnivorous trap in the humped bladderwort, *Utricularia gibba*, we identified genes similar to those expressed in surfaces of flat leaves.*

Ectopic expression and computational modeling reveals how slight shifts in gene expression domains make the difference between a flat leaf and a convoluted trap structure. Flexibility in growth rates in orthogonal polarity fields allows for diversity in shapes formed through development.

*Leaves vary from planar sheets and needle-like structures to elaborate cup-shaped traps. Here, we show that in the carnivorous plant *Utricularia**

gibba, the upper leaf (adaxial) domain is restricted to a small region of the primordium that gives rise to the trap's inner layer. This restriction is necessary for trap formation, because ectopic adaxial activity at early stages gives radialized leaves and no traps.

We present a model that accounts for the formation of both planar and nonplanar leaves through adaxial-abaxial domains of gene activity establishing a polarity field that orients growth. In combination with an orthogonal proximodistal polarity field, this system can generate diverse leaf forms and account for the multiple evolutionary origins of cup-shaped leaves through simple shifts in gene expression.

Coverdale, T.C. (2019) Defence emergence during early ontogeny reveals important differences between spines, thorns and prickles. ANNALS OF BOTANY 124:doi:10.1093/aob/mcz189

Author's abstract: Large mammalian herbivores made the world spiny. Over evolutionary time scales, the rise of physically defended plants, species that produce spines, thorns or prickles, has been linked to the diversification of large herbivores.

In African savannas, for example, spinescence has arisen at least 55 times across diverse plant lineages, largely in response to, and concurrent with, the diversification of large bodied browsers.

The contemporary distribution of browsing mammals likewise drives conspicuous variation in plant defence phenotype across landscapes, such that plant communities in areas of high herbivore density tend to be more spiny than those lacking herbivores. These patterns are caused by both selection against undefended species where herbivores are abundant and the induction of defences in spinescent species following browsing.

Speirs: Having long had an interest in *Opuntia*, this caught my eye. Spines are condensed leaf tissue, thorns are condensed branches, and prickles are outgrowths of leaf epidermal tissue. Some plant species only have one type, such as *Opuntia*, which has spines. Other plant species, not necessarily desert plants, may have two or three types.

Rizal, Y., et al (2020) **Last appearance of Homo erectus at Ngandong, Java, 117,000 to 108,000 years ago.** NATURE 577:381-385

Authors' abstract: *Homo erectus* is the founding early hominin species of Island Southeast Asia, and reached Java (Indonesia) more than 1.5 million years ago. Twelve *H. erectus* calvaria (skull caps) and two tibiae (lower leg bones) were discovered from a bone bed located about 20 m above the Solo River at Ngandong (Central Java) between 1931 and 1933, and are of the youngest, most-advanced form of *H. erectus*.

Despite the importance of the Ngandong fossils, the relationship between the fossils, terrace fill and ages have been heavily debated. Here, to resolve the age of the Ngandong evidence, we use Bayesian modelling of 52 radiometric age estimates to establish, to our knowledge, the first robust chronology at regional, valley and local scales.

We used uranium-series dating of speleothems to constrain regional landscape evolution; luminescence, 40argon/39argon (40Ar/39Ar) and uranium-series dating to constrain the sequence of terrace evolution; and applied uranium-series and uranium series–electron-spin resonance (US–ESR) dating to non-human fossils to directly date our re-excavation of Ngandong.

We show that at least by 500 thousand years ago (ka) the Solo River was diverted into the Kendeng Hills, and that it formed the Solo terrace sequence between 316 and 31 ka and the Ngandong terrace between about 140 and 92 ka.

Non-human fossils recovered during the re-excavation of Ngandong date to between 109 and 106 ka (uranium-series minimum) 16 and 134 and 118 ka (US–ESR), with modelled ages of 117 to 108 thousand years (kyr) for the *H. erectus* bone bed, which accumulated during flood conditions. These results negate the extreme ages that have been proposed for the site and solidify Ngandong as the last known occurrence of this long-lived species.

Wadley, L., et al (2020) **Cooked starchy rhizomes in Africa 170 thousand years ago.** SCIENCE 367:87-91

Authors' abstract: *Early evidence of cooked starchy plant food is sparse, yet the consumption of starchy roots is likely to have been a key innovation in the human diet. We report the identification of whole, charred rhizomes of plants*

of the genus Hypoxis from Border Cave, South Africa, dated up to 170,000 years ago. These archaeobotanical remains represent the earliest direct evidence for the cooking of underground storage organs.

The edible Hypoxis rhizomes appear to have been cooked and consumed in the cave by the Middle Stone Age humans at the site. Hypoxis has a wide geographical distribution, suggesting that the rhizomes could have been a ready and reliable carbohydrate source for Homo sapiens in Africa, perhaps facilitating the mobility of human populations.

Plant carbohydrates were undoubtedly consumed in antiquity, yet starchy geophytes were seldom preserved archaeologically. We report evidence for geophyte exploitation by early humans from at least 170,000 years ago. Charred rhizomes from Border Cave, South Africa, were identified to the genus Hypoxis L. by comparing the morphology and anatomy of ancient and modern rhizomes.

Hypoxis angustifolia Lam., the likely taxon, proliferates in relatively well-watered areas of sub-Saharan Africa and in Yemen, Arabia. In those areas and possibly farther north during moist periods, Hypoxis rhizomes would have provided reliable and familiar carbohydrate sources for mobile groups.

Mehr, S.A., et al (2019) **Universality and diversity in human song.** SCIENCE 366:doi.org/10.1126/science.aax0868

Authors' abstract: *It is unclear whether there are universal patterns to music across cultures. We examined ethnographic data and observed music in every society sampled. For songs specifically, three dimensions characterize more than 25% of the performances studied: formality of the performance, arousal level, and religiosity.*

There is more variation in musical behavior within societies than between societies, and societies show similar levels of within-society variation in musical behavior. At the same time, one-third of societies significantly differ from average for any given dimension, and half of all societies differ from average on at least one dimension, indicating variability across cultures.

Music is often assumed to be a human universal, emerging from an evolutionary adaptation specific to music and/or a by-product of adaptations for affect,

language, motor control, and auditory perception. But universality has never actually been systematically demonstrated, and it is challenged by the vast diversity of music across cultures. Hypotheses of the evolutionary function of music are also untestable without comprehensive and representative data on its forms and behavioral contexts across societies.

We conducted a natural history of song: a systematic analysis of the features of vocal music found worldwide. It consists of a corpus of ethnographic text on musical behavior from a representative sample of mostly small-scale societies, and a discography of audio recordings of the music itself.

We then applied tools of computational social science, which minimize the influence of sampling error and other biases, to answer six questions.

- Does music appear universally?*
- What kinds of behavior are associated with song, and how do they vary among societies?*
- Are the musical features of a song indicative of its behavioral context (e.g., infant care)?*
- Do the melodic and rhythmic patterns of songs vary systematically, like those patterns found in language?*
- And how prevalent is tonality across musical idioms?*

Analysis of the ethnography corpus shows that music appears in every society observed; that variation in song events is well characterized by three dimensions (formality, arousal, religiosity); that musical behavior varies more within societies than across them on these dimensions; and that music is regularly associated with behavioral contexts such as infant care, healing, dance, and love.

Analysis of the discography corpus shows that identifiable acoustic features of songs (accent, tempo, pitch range, etc.) predict their primary behavioral context (love, healing, etc.); that musical forms vary along two dimensions (melodic and rhythmic complexity); that melodic and rhythmic bigrams fall into power-law distributions; and that tonality is widespread, perhaps universal.

Barbeito-Andrés, J., et al (2020) **Congenital Zika syndrome is associated with maternal protein malnutrition.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaw6284

Authors' abstract: *Zika virus (ZIKV) infection during pregnancy is associated with a spectrum of developmental impairments known as congenital Zika syndrome (CZS). The prevalence of this syndrome varies across ZIKV endemic regions, suggesting that its occurrence could depend on cofactors.*

Here, we evaluate the relevance of protein malnutrition for the emergence of CZS. Epidemiological data from the ZIKV outbreak in the Americas suggest a relationship between undernutrition and cases of microcephaly. To experimentally examine this relationship, we use immunocompetent pregnant mice, which were subjected to protein malnutrition and infected with a Brazilian ZIKV strain.

We found that the combination of protein restriction and ZIKV infection leads to severe alterations of placental structure and embryonic body growth, with offspring displaying a reduction in neurogenesis and postnatal brain size. RNA-seq analysis reveals gene expression deregulation required for brain development in infected low-protein progeny. These results suggest that maternal protein malnutrition increases susceptibility to CZS.

ZIKV infection during pregnancy leads to birth defects in some but not all affected mothers. Approximately 6 to 12% of infected pregnancies will result in CZS. The distribution of CZS in human populations, however, is asymmetrical.

In Brazil, which has reported ~95% of all CZS cases and where ZIKV has severely affected multiple states, most occurrences of CZS (~75%) were found in the disadvantaged socioeconomic region of the Northeast.

Epidemiological surveys showed that, even within Northeastern communities, ZIKV-related microcephaly was most prevalent in those areas with the lowest socioeconomic status. Hence, cofactors are likely to play a key role in modulating ZIKV infection's severity and the level of developmental impairment.

Malnutrition is considered one of the most critical causes of immunodeficiency worldwide, as it can substantially increase a host's susceptibility to an infection

and amplify pathogenesis severity. An insufficient intake of protein can be a form of undernutrition and is a widespread problem in low-income populations, which have limited access to more expensive food components.

Here, by analyzing epidemiological data collected in Brazil from the ZIKV outbreak period, we found a significant prevalence of microcephaly in states where undernutrition is more frequent.

Albers, T.N.H. (2020) **Currency devaluations and beggar-my-neighbour penalties: evidence from the 1930s.** ECONOMIC HISTORY REVIEW 73:233-257

Author’s abstract: The currency devaluations of the 1930s facilitated a faster recovery from the Great Depression in the countries depreciating, but their unilateral manner provoked retaliatory and discriminatory commercial policies abroad. This article explores the importance of the retaliatory motive in the imposition of trade barriers by gold bloc countries during the 1930s and its effects on trade.

Relying on new and existing datasets on the introduction of quotas, tariffs, and bilateral trade costs, the quantification of the discriminatory response suggests that these countries imposed significant beggar-my-neighbour penalties. The penalties reduced trade to a similar degree that modern regional trade agreements foster trade.

Furthermore, the analysis of contemporary newspapers reveals that the devaluations of the early 1930s triggered an Anglo-French trade conflict marked by tit-for-tat protectionist policies. With regards to global trade, the unilateral currency depreciations came at a high price in political and economic terms. These costs must have necessarily reduced their benefit to the world as a whole.

Speirs: It has been known for more than a century that currency devaluations to out-compete rivals in international trade and make imports more expensive are counterproductive in the long run. Free trade agreements such as NAFTA and the European Union increased prosperity overall. Tariffs and trade wars provide temporary benefits but soon choke off exports, which is why the Great Depression lasted a decade instead of being a minor recession of a few years.

Some countries such as China explicitly devalue their currencies to maintain an edge, while others such as Canada do so quietly. Canada, for example, tries to keep its dollar at 65 to 75 cents against its largest trading partner, the USA. Although free trade is best in the long run, humans en masse are short-sighted and the politicians elected by them even more so, thus the new trade wars.

Thomas, P.S., et al (2019) **Preventing undesirable behavior of intelligent machines.** SCIENCE 366:999-1004

Authors’ abstract: Machine learning algorithms are being used in an ever-increasing number of applications, and many of these applications affect quality of life. Yet such algorithms often exhibit undesirable behavior, from various types of bias to causing financial loss or delaying medical diagnoses. In standard machine learning approaches, the burden of avoiding this harmful behavior is placed on the user of the algorithm, who most often is not a computer scientist.

Intelligent machines using machine learning algorithms are ubiquitous, ranging from simple data analysis and pattern recognition tools to complex systems that achieve superhuman performance on various tasks. Ensuring that they do not exhibit undesirable behavior, that they do not, for example, cause harm to humans, is therefore a pressing problem.

We propose a general and flexible framework for designing machine learning algorithms. This framework simplifies the problem of specifying and regulating undesirable behavior.

To show the viability of this framework, we used it to create machine learning algorithms that precluded the dangerous behavior caused by standard machine learning algorithms in our experiments. Our framework for designing machine learning algorithms simplifies the safe and responsible application of machine learning.

Speirs: In other words, it is time to make Asimov’s Three Laws of Robotics a practical application in software design. In the text of this article, the authors did in fact cite Asimov.