

OPUNTIA 536



Halloween 2022

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.

AROUND COWTOWN

photos by Dale Speirs

We had a mild autumn with no snow until October 22. First, let me clear off a bunch of photos taken during the summer.

Several companies rent electric scooters and bicycles in Calgary. They are left on the sidewalks, have built-in GPS to track them, and can only be activated by a smartphone account. Beyond a certain geographic area they seize up and a silent alarm sounds.

A couple of years before the pandemic the bicycles disappeared because everyone seemed to prefer scooters. Surprising therefore, to see bicycles make a comeback this summer.



Below: Taken down the avenue from Chez Opuntia on October 19.

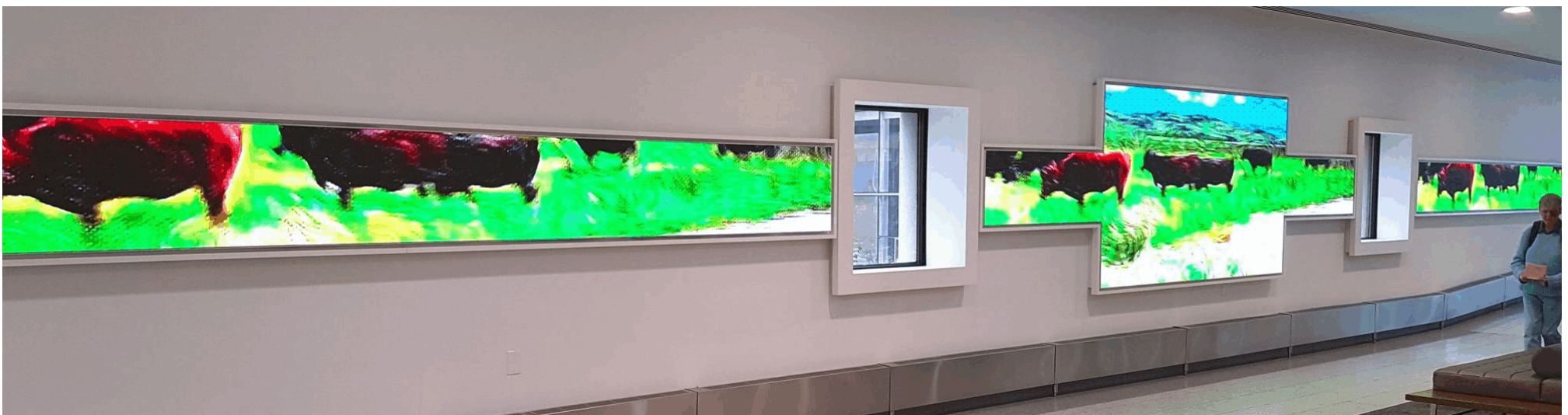
At right: The first snow of the season was on October 22, with 25 cm. Seen here is the big spruce in my front yard. As is usual, the first snowfall or two will be heavy wet snow bowing down the trees and shrubs. Once the cold air settles in for the season, then most snowfalls through the winter will be dry powder.



BOW VALLEY SQUARE ELECTRONIC ART: PART 5
photos by Dale Speirs

[Parts 1 to 4 appeared in OPUNTIA #487, 490, 516, and 527.]

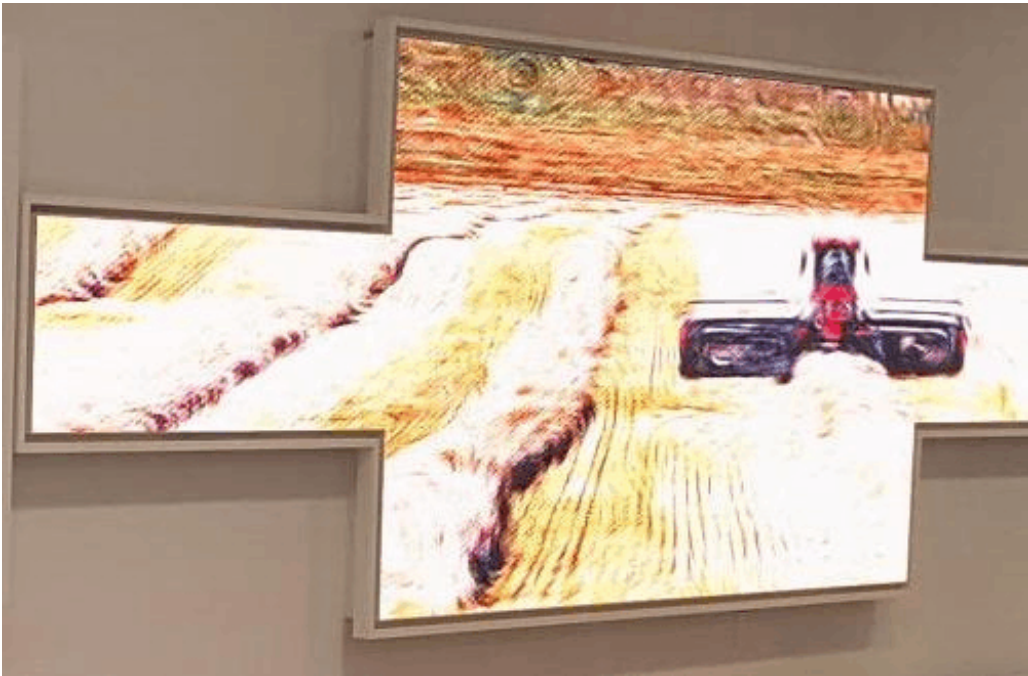
Bow Valley Square is a cluster of skyscrapers in downtown Calgary. Along the south side, connecting to the Brookfield Place tower across the street is this wall of electronic art. The displays by local artists constantly rotate. Here are some autumn views. Close-ups of the centre panels are on the next page.



Below: Swathing of the grain crops generally begins in the last week of August.

Upper right. Cattle are usually brought in from summer pastures after the harvest is in. During the winter, the steers and unwanted heifers will be marketed and the pregnant cows fed with hay until they calve in spring.

Lower right: Contrary to popular belief, deciduous trees do not change leaf colour because of frost but because the days are getting shorter, a more reliable signal to prepare for winter.



HALLOWEEN FICTION: PART 5

by Dale Speirs

[Parts 1 to 4 appeared in OPUNTIA's #427, 458, 486, and 511.]

Comedy Tonight.

By the late 1940s, the custom of trick-or-treating for Halloween was spreading across the USA and Canada. My suspicion is that radio shows played a more prominent part than is recognized in spreading new customs such as this.

Script writers of weekly series were always looking for ideas, and holidays were a popular source. National radio programmes reached audiences in the high tens of millions, far more than any printed periodical. What was just a local custom would be publicized nationally by radio and inspire others to copy. Halloween customs as we know them today are postwar phenomena.

In his time, Jack Benny (real name Benjamin Kubelsky) was by far the most successful comedian in North America, first in vaudeville, then on radio from 1932 to 1955.

His radio shows are available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary. He made the transition to television in the middle 1950s but was never as successful. He died in 1974.

Benny played the part of a miser, vain about his blue eyes but not ashamed to admit he wore a toupee. His valet was Rochester Van Jones, a gravel-voiced Negro who was more a companion than a servant. Benny occasionally got into trouble with southern audiences who thought Rochester was uppity and didn't know his place.

"Jack Throws A Halloween Party" aired on 1938-10-30. That was the same night when, an hour later, Orson Welles panicked his listeners nationwide with "War Of The Worlds", the single most famous radio broadcast in history.

The episode began with Rochester preparing food for the Halloween party. Jack Benny criticized him for cutting the roast beef too thick for the sandwiches. Extra help had been hired, Rochester's brother September. (*"I was born in Rochester and he was born in September."*)

Benny's regular cast arrived one by one and did their routines. Mary Livingstone (Sadie Marks, Benny's wife in real life) munched on some olives, unaware that Benny had intended only one for each guest.

Kenny Baker, a forgettable tenor, sang a forgettable ballad. The guests kept arriving. Next up was the drunken bandleader Phil Harris, who showed up with his latest girlfriend. Then the rotund announcer Don Wilson appeared, touting the sponsor's product Jell-O.

The main course was announced, a squab. One bird that is, for the entire company. Each person got a single hor d'oeuvres. There was a big fight for the deviled egg.

The evening ended in disaster when September and the cook fought over the squab and one of them accidentally swallowed it. Benny sent Rochester out for frankfurters.

What was interesting about this episode was that it illustrated what Halloween was like before World War Two. There was no mention of costumes or trick-or-treating, both of which did not become common until the late 1940s. The Halloween traditions we are used to today are in fact a modern invention.

"Halloween Show/Dark Passage" aired postwar on 1947-11-02. The first half of the episode was a series of gags, mostly about Halloween. The second half was a parody of a then-current movie DARK PASSAGE, long since forgotten.

During the intro, Don Wilson bobbled a comment about Halloween two days before. He said "*October twen* [split-second pause] *tee-first*". A rule of live broadcasting is that if you make a mistake in speaking, keep going at full speed. Half the audience won't notice and the other half will assume they mis-heard.

Wilson ploughed onward. Jack Benny caught the mistake, as indeed the studio audience did. In his opening monologue, he reminded Wilson that Halloween was October 31, and got a hearty chuckle from the audience.

Benny asked what costume Wilson wore to his Halloween party. He replied he let a chain drag from the back of his belt and went as a gasoline tanker. Mary Livingstone remembered the previous Halloween when Wilson painted lines on the back of his shirt and went as a football field.

There were tricks played. Someone stole a sign from a Chinese restaurant and nailed it above the door on Benny's house. Undeterred, he put a kimono on Rochester and went into business.

Benny gushed about a costume party where he was smitten by a masked Little Bo Peep. They danced and he tried to make out with her. At that point, on stage, Dennis Day arrived and let out that Little Bo Peep was the bandleader Phil Harris. (Day had replaced Baker as the resident tenor.)

Needless to say, Benny was perturbed. Harris confirmed the story and demanded the nylons Benny had promised. He wanted them for his wife Alice Faye. In the immediate post-war period, nylon stockings were scarce and expensive.

Day had his own anecdote. He wanted to play a trick on his father with the bucket of water over the door trick. In testing it, he got soaked himself and caught a cold.

Hollywood is the only place where people get colds from getting wet. Scriptwriters and producers were and still are ignorant of the fact that the common cold is caused by a virus, not wet exposure.

Having run out of Halloween jokes, the episode then shifted to the movie parody, which had nothing to do with the holiday. Much of the humour was obsolete. I am old enough to understand the Studebaker jokes but anyone born after 1967, when the company went out of business, will miss the humour.

The next year showed some changes. "Trick Or Treating With The Beavers" aired on 1948-10-31. That it was Halloween night was specifically mentioned in the intro. This time Don Wilson pronounced the date correctly.

The opening scene was set in Beverley Hills where Jack Benny lived. In his spare time, he volunteered as headmaster of the local Beavers troop. The boys were out trick-or-treating.

They stopped to inventory their loot. Either they had just started or else Beverley Hills residents were cheapskates, because each boy only listed three or four types of candy. Benny got a big laugh when he listed his takings, which included a can of dog food.

The dialogue diverted when the boys began discussing Benny's athletic accomplishments. He had told them how he had knocked out Gene Tunney and won several Olympic medals in the 1948 games in London.

There was also a joke about his 1945 movie "The Horn Blows At Midnight", which modern listeners will miss. The movie failed to earn back its costs at the box office. Benny constantly used it for jokes in the years that followed.

Benny and the boys went down a street where by incredible coincidence all his supporting actors lived. There was an early custom whereby pranksters would ring doorbells and then hide nearby to see if the owner came out. The idea faded out in favour of trick-or-treating but I have heard it mentioned on other old-time radio shows of that time.

In any event, Benny rang the doorbell at Mary Livingstone's house. Her maid Polly answered, screamed, and ran back inside the house. Only then did the listeners learn that Benny was dressed as a werewolf. He had taken one of his old toupees, cut eye holes in it, and wore it as a face mask. Pretty clever, actually.

One of the boys said he had told the old lady (his mother) he would soon be home. Benny reprimanded him for calling her that. In the distance, a yodeler's voice echoed from a reverb microphone "*told the old lady who*". Thereafter a running gag began. Whenever someone said a line that resembled it, a yodel would resound from the distance.

The next stop was tenor Dennis Day's house. He lived with his mother, a battleaxe with a voice that could be heard in the next county. She was carrying a baseball bat so Benny retreated in haste.

Next up was a meeting with Mr Kitzel, a Yiddish dialectician character. He was walking around looking for his wife but had trouble distinguishing her from costumers dressed as monsters.

From there, the group went over to band leader Phil Harris' house. His idea of a treat for the boys was to sing a song. He said his wife Alice Faye (singer/actress) had taken their kids to a Halloween party and he was babysitting her money.

Announcer Don Wilson's house was the final stop. He and the Sportsmen Quartet did a musical commercial for Lucky Strike cigarettes. A few random gags with the Beavers finished off the sketches.

Halloween With A Smirk.

The comedian Paul Lynde, I feel safe in saying, is unknown to the Millennial and subsequent generations, but Boomers will remember him. He popped up in just about every television show during the 1960s and 1970s. He did mostly stand-up or skits, and had a unique and instantly recognizable voice.

I was surprised to find in the bargain bin of a video store a DVD of one of his many television holiday specials, THE PAUL LYNDE HALLOWEEN SPECIAL. The show aired on 1976-10-29 and was never seen again until the producer of the show managed to clear all the rights and release it on disk in 2007. The show has one particular significance as being the first television appearance of the rock band KISS, who performed three songs.

The basic theme of the special was that Lynde had befriended two witches, one of whom was his housekeeper Margaret Hamilton. She is today remembered mainly for her appearance as one of the witches in the movie THE WIZARD OF OZ. The witches switched Lynde around from one scenario to another, enabling a string of songs and dance routines.

The comedy was not sitcom style but rather Lynde snapping out gags in between the songs. Even back then the style of the special was kitschy and hasn't improved with time. If not for KISS fans, I doubt the DVD would have been green-lighted.

The guest list had names familiar to Boomers. Tim Conway did a routine with Lynde as two truck drivers competing for the attentions of Roz Kelly, at her sexiest best in those days in miniskirt and halter top.

Florence Henderson is remembered as the mother of the Brady Bunch, but her initial career was singing. In this special, she got a chance to rip out a few nightclub songs in torch singer style.

KISS performed in full costume, so they were certainly suitable for a Halloween show. Lynde asked one of them who did their makeup, to which Gene replied "*What makeup?*".

What's Halloween Without A Werewolf?

DARK FANTASY was an old-time radio anthology series with 31 episodes which aired 1941-42. Unusual for the times, it was a national show on the NBC network aired out of Oklahoma City. All the episodes were written by Scott Bishop. They were a mixture of science fiction, fantasy, weird, and twist mysteries.

"W Is For Werewolf" aired on 1942-02-13. As the announcer said, that date was a Friday the 13th and the episode was the thirteenth of the series. OTR fans afflicted by triskaidekaphobia take note.

Jim Howard and Bill Andrews met up in Cape Cod after five years. Andrews invited Howard to come visit his island, a short rowboat paddle offshore. Andrews' grandson John wasn't the same since his father Bill Jr had died. Howard's family Angela and baby Sondra arrived shortly after.

Bill had asked Jim to bring an order of books on lycanthropy. John was definitely out of sorts, with hairy palms and talking in tones of rising hysteria. All very awkward, and not helped by islanders gossiping about things that go bump in the night.

"*Don't worry about the howling*", Bill told Jim. The baby, on the other hand, was quiet as a mouse. Jim went snooping about with no satisfaction. There were screams in the night, gunshots were fired, and a coffin desecrated. A wolf was shot dead. John, of course.

The modern police procedural, both on and off the air, owes much to DRAGNET, the radio version. These episodes were based on true cases of the Los Angeles Police Department. As the opening blurb stated, "*only the names have been changed to protect the innocent*".

"The Werewolf" was the third episode of the radio series. It was the first episode to use the now-famous orchestral theme music DUM-de-DUM-DUM, which thereafter thundered out weekly at listeners.

The episode aired in summer on 1949-06-17. In the opening dialogue, Sgt Joe Friday said it happened on February 2. Because of its title, radio stations today which have old-time radio programmes usually air it at Halloween.

Eighteen women had been beaten and robbed by a big hairy man the press dubbed The Werewolf. He was ugly too. He always seemed to be a step ahead of the LAPD.

The attacks were in the early morning against single women coming or going to shift work, such as waitresses or factory workers. The Werewolf used a different stolen car each time. Undercover policewomen were deployed as bait. One useful tip was a report about stolen licence plates, and another was narrowing down stolen vehicle reports to about six cars.

Most of the work was plodding about, dull routines day after day. DRAGNET emphasized that police work is mostly making telephone calls, talking to people who might have seen something, or driving through parking lots and streets checking licence plates. Most police shows in those days and most shows today are heavy on the bang-bang-bang, without acknowledging the ordinary routine.

The break came unexpectedly when a witness identified the car. Unfortunately another woman was attacked, this time a fatal. Friday and his partner Ben Romero arranged a plan with the chief to flood the area with a full-scale dragnet.

The trap was sprung and the chase was on. The Werewolf tried to shoot his way out but surrendered after a fight. In the epilogue it was announced the suspect was tried and convicted. He was now serving a life sentence in state penitentiary.

Tricks.

Malicious tricks became associated with Halloween during the middle 1900s. Some people got carried away, although I suspect this was more in fiction than in reality. Certainly people had their windows soaped or rolls of toilet paper thrown about their trees.

The one I remember my grandfather telling me was someone who, in the early hours of the morning, went about the village of Eckville (where I was born) and pulled each outhouse back about a metre to expose the pit. The prankster threw some tall grass from a hayfield over the hole and camouflaged the booby trap. Apparently he was very successful. Those were the days.

“Halloween” was a Jack Benny episode which aired on 1941-11-02 as part of THE JELL-O PROGRAM. Few people outside the sponsor’s office used that

title. The episode began with a musical intro by the orchestra and a lengthy commercial for Jell-O.

Don Wilson then announced the clock would be turned back to the previous Friday, All Hallows Eve, at Jack Benny’s house in Beverley Hills. Benny was dressing in costume as the Devil but he wasn’t satisfied. The horns kept slipping to one side. Rochester said the problem was Benny’s toupée, not the horns.

Mary Livingstone showed up in a mink coat. They exchanged banter. Jack said he was going over to Claudette Colbert’s house and soap her windows. They were interrupted by Don Wilson, arriving dressed as a kangaroo, with Dennis Day as a baby roo riding in his pouch.

Wilson was never as fat and gargantuan in real life as he was on radio. However, the advantage of radio was that everyone could imagine their own image of him as a giant. The studio audience could as well, even though they saw the actors lined up at microphones reading from scripts.

Phil Harris called to say he would be late because his night school teacher gave him detention. To fill the time, Day sang a forgettable love ballad. Benny handed out doughnuts and cider.

The beverage was spiked heavily, so Jack asked Rochester what he put in it. “*A little Central Avenue vitamins*”, he replied. The audience laughed uproariously. Gin, for those who didn’t get the joke, including myself.

I had to Google the reference. During the 1940s, the Central Avenue district of Los Angeles was equivalent of Harlem, with numerous jazz clubs and speakeasies and a large Negro population.

A neighbour Mr Billingsley arrived, dressed as Marie Antoinette. Benny asked the stupid question if he was dressed for Halloween. Billingsley sarcastically replied that he had a splitting headache and was going to have his head cut off.

Harris finally arrived sans costume, and the group departed to ring doorbells and play tricks. The orchestra played an instrumental to fill the time.

Then to Benny and the gang at actor Ronald Colman’s house. (In real life, they were next-door neighbours. (Lucille Ball had the house on the other side.)

Benny proposed, purely as a gag, to steal Colman's birdbath and put it on Benny's front lawn. It was too heavy to budge, so they went across the street to Basil Rathbone's house.

Jack rang the doorbell, then ran and hid. The door was answered by Rathbone. Judging from the audience applause, the man himself must have been on stage at the microphone. Basil caught Benny, and decided to join him.

This episode illustrates the evolution of Halloween night. Trick-or-treating didn't develop until the early 1950s. Before that, there were tricks but no treats. Most people went to costume parties or door-to-door as mummers.

THE BIG BANG THEORY was a television comedy series about socially-dysfunctional young physicists at CalTech Pasadena. The episode "The Good Guy Fluctuation" aired just before Halloween on 2011-10-27.

The opening scene was in Sheldon Cooper's office at the university where he was working late. He was an Asperger Syndrome case with an insufferable superiority complex. From out in the corridor came his name being called. Investigating, he rightly suspected his friends were trying to scare him with Halloween tricks.

First, the corridor lights switched to ghostly illumination. Blood dripped down the walls, which he recognized was just a coloured solution. Then a skeleton flew at him, but he saw it was a fake on a zip line. Having used up their tricks, his friends and colleagues Howard Wolowitz and Rajesh Koothrappali came out into the open.

They admitted their pranks and walked Sheldon back to his office where they chatted a moment. In the meantime his roommate and fellow physicist Leonard Hofstadter had snuck into the office wearing a monster mask.

He came out of a hiding place and silently approached Sheldon from behind. Turning about, Sheldon screamed at the unexpected monster face, fainted, and wet his pants.

Thereafter Sheldon tried repeatedly to gain revenge and failing. He tried to booby-trap the mailbox he and Leonard shared at their apartment. Didn't work, but Leonard successfully counter trapped the box and scared Sheldon off his feet with an airbag-type balloon when he opened the box.

Next up, Sheldon put a milk snake into Rajesh's desk drawer. That didn't work, since Rajesh was not frightened of snakes. Undaunted, he tried an electric-shock buzzer in his hand.

The testing phase, when he shook hands with himself, knocked him to the floor in convulsions. Satisfied the buzzer had the power, Sheldon tried to use it on Howard. The latter recognized the gag and instead faked a heart attack that scared Sheldon.

Still stymied, Sheldon finally had success when he painted himself as a zombie, and hid under the living room couch. Leonard came home and sat on the couch. When a zombie burst out from underneath the cushions, Leonard was catapulted across the room in terror. Bazinga!

Halloween Celebrations.

"DNF" by Kristine Kathryn Rusch (2021 Sep/Oct, ELLERY QUEEN) was about a Halloween night event called the Night Frights Run. The footrace was laden with spooky things prepared by the organizers as the runners trotted through the dark. Both runners and spectators were in full costume.

One of the runners did not finish the race. She was found unconscious off the track, badly beaten. Eventually the discovery was made that she had met up with a gang of bank robbers who were hiding the loot near the track. At that point, the story just plain fizzled out.

THE CIDER SHOP RULES (2021) by Julie Anne Lindsey was a novel in a cozy series about Winona Mae Montgomery and her Granny Smythe of Blossom Valley, West Virginia. They operated a cider shop and sorted out local murders.

The Fall Festival was underway, running for a month from Halloween. For Jacob Potter, local pumpkin farmer, this was his busiest time of year. Besides the pumpkin picking, he offered hay rides, piglet races, and a corn maze. Alas, he was sent off to rest in eternal peace by a perpetrator unknown. His body was found in Winona's pickup truck, hidden under a tarpaulin.

The autumn was also busy for the apple harvest and cider production at Smythe Orchards. Winona and Granny marketed four kinds of cider, three apple recipes, pumpkin rolls, and, unfortunately, fried bologna.

The usual back stories and suspects filled the centre of the novel, while the Smythe Orchard worked hard to take advantage of Halloween. Ultimately Winona winnowed down the list of suspects. (Pardon the verb.)

This was so she could uphold the great traditions of Marpleism by getting herself trapped with the killer. A disgruntled ex-employee of Potter did the deed but there was a back story. The ending dwindled away with some trivial events. The orchard carried on.

THE BLACK CAT SEES HIS SHADOW (2017) by Kay Finch was a novel in a cozy series about Sabrina Tate and her black cat Hitchcock. Her village of Lavender, Texas, was hosting its annual Pumpkin Days Festival.

The events included a bake-off, pumpkin toss, pumpkin decorating, pumpkin cannon, and vendor booths. Sabrina met a caricature artist named Tia Hartwell, a doppelganger who also had a black cat, named Merlin. Unlike Sabrina, Tia had a son Damon. All very Halloweenish.

Tia was harassed by a boor named Calvin Fisher, a loud-mouthed dealer at the festival. He was found murdered in his pickup. Hitchcock found the body, or at least meowed loud enough to get Sabrina's attention. Tia was the prime suspect, so Sabrina, in her capacity as the local Miss Marple, went to work.

Fisher's death was celebrated by those who knew him. Good riddance to bad rubbish. Others were more interested in the stolen gems he had possession of and which became the MacGuffin of the plot. In the final confrontation, Hitchcock saved Sabrina's life by knocking down a display wall in a booth, thereby causing a distraction and etcetera.

After the wrap-up of details, there was a recipes appendix for Pumpkin Crunch, Pumpkin Bars, and Pumpkin Pie. Happy Halloween!

Cozy Murders.

TRICK OR TREACHERY (2000) by Jessica Fletcher and Donald Bain was a Halloween in Cabot Cove, Maine. A nasty psychic was in town. A reclusive woman was the target of a whispering campaign that she was a witch. Jessica Fletcher, meanwhile, had more serious problems. She was trying to find a good costume for the big Halloween party,

The supposed witch was found dead in the cemetery on Halloween night. The killer didn't bury her though. The party was at a house adjacent to the cemetery, and all the attendees were suspects.

At that point, I paused and did some Googling. According to sources, Jessica Fletcher had solved 274 murders during the 12-year run of her television series. 60 of those deaths were in Cabot Cove, which had a population of about 3,500.

I couldn't find mortality numbers for the novels, of which there are 56 to date nor determine what proportion were in Cabot Cove. Say about 70 murders all told and taking the village in proportion, about 20 of them were local. All sources agreed that on a per capita basis, Cabot Cove had the highest murder rate in the world, more than double the big cities with high crime rates.

But I digress. Dressed fetchingly as a ghoul, Fletcher attended the party adjacent to where the victim had suddenly departed life. Much sleuthing as expected. Another man, the victim's brother, died the hard way. He had double-crossed his business partners before they could double-cross him.

One of them took severe umbrage. The J'accuse! meeting finished up in the cemetery but fortunately no one else died.

MURDER OUTSIDE THE LINES (2021) by Krista Davis was the third novel in a series about Florrie Fox of Georgetown, District of Columbia. She was store manager of Color Me Read, a bookstore specializing in adult colouring books. No, seriously.

Halloween was nigh and Fox arranged for psychic author Hilda Rattenhorst to read from her book of ghost stories. This time it was the latter who discovered the body, having seen a bare foot sticking out of a carpet roll while she was en route to the bookstore.

Fox summoned her boyfriend, police sergeant Eric Jonquille, but when they checked the scene the corpse was gone. Rattenhorst carried on with the reading but insisted she felt the murderer's vibrations in the store.

John Maxwell, the store owner, was an archaeologist on the side. He received a human skull in the mail, not because of Halloween but because a friend wanted him to keep the skull safe for a while.

Meanwhile, in between serving customers, Fox was creating Halloween themed colouring books. There's never a dull moment in the bookselling business.

Numerous alarums followed, not necessarily related to the corpse in the carpet roll. Lots of back stories. Another body appeared in a neighbour's yard, partially buried. The trouble was that this victim had still been alive at the time of the first victim. The third suddenly-defunct was found in a cemetery because someone forgot to bury him.

The casualty rate, not all deaths, continued to climb. A Halloween to remember. The killer was finally run to ground, a con man who didn't like people recognizing him.

This was a bookstore cozy, so it was strange to see a recipes appendix. In case you are interested, they included Russian Tea, Cinnamon-Apple Pancakes, Pumpkin Cupcakes, and French Apple Cake.

HALLOWEEN PARTY MURDER (2021) was an anthology of three cozy novellas. The first was the eponymous story "Halloween Party Murder" by Leslie Meier, set in Tinker's Cove, Maine. Local reporter Lucy Stone was the resident Jessica Fletcher.

Ty and Heather Moon had turned their Victorian house into a haunted one for a Halloween party in aid of charity. Stone was miffed when someone suggested she dress as Madame Defarge. Not far off the mark though.

Heather died of a fentanyl overdose but her death was murder, not accidental. The party trickled down and the sleuthing began. Municipal elections were underway for various positions, including District Attorney. There was corruption in the law offices, and drugs had been stolen from police evidence rooms and re-sold on the street.

Heather discovered the thefts and had to be silenced. Stone, by now a veteran Fletcherite, managed to flush out the killer with the usual gunpoint confrontation. She survived, of course.

"Death Of A Halloween Party Murderer" by Lee Hollis (pseudonym of siblings Rick Copp and Holly Simason) was part of another Fletcherite series, this one set in Bar Harbor, Maine.

This was part of a food cozy series. Recipes were scattered through the text, rather than compiled in an appendix. The protagonist Hayley Powell was a food columnist. She owned a restaurant which was doing quite well. To celebrate, she staged a Halloween party.

One of the guests was dressed as a killer clown and departed life in that undignified manner. Pausing only for a recipe for Chicken Cordon Boo Bites, Powell was off and Fletcherering.

Lots of back stories and an obvious suspect. The next recipe was Monster Meatball Sliders, to be washed down with Boo Boozy Milkshakes. The latter had 2.5 ounces of bourbon per glass, so don't slurp and drive.

Powell then got herself trapped in a pantry with the killer. With a single bound and all that, she survived to the final recipe. This was No Bake Candy Pie, to be served with a Candy Corn Martini.

"Scared Off" by Barbara Ross was about a teenager Halloween party gone horribly wrong when crashers disrupted the gathering. Things went from bad to worse when an elderly woman, dressed as a ghost, was found dead in the back yard.

The locale was Busman's Harbor, Maine, and the local Fletcher was Julia Snowden. A word to the wise; never plan a vacation trip along the Maine coast. Those fishing villages make Chicago look like a walk in the park.

The deceased had a history of skimming employers' accounts as a bookkeeper under various names in various villages. Many times she bankrupted small businesses before skipping town. The murderer was the son of victimized parents who wanted to avenge them.

Just for nice, since this wasn't a food cozy, the novella finished up with a recipe for Gluten-Free Pumpkin Cookies.

INK AND SHADOWS (2021) by Ellery Adams (pseudonym of Jennifer Stanley) was the fourth novel in a cozy series about Nora Pennington of Miracle Springs, North Carolina. She owned a bookstore and had founded a book club called the Secret, Book, and Scone Society. Pay attention to the commas in that name. The club was about secrets, books, and scones, not secret books or secret scones.

Twice Halloween, so Nora decorated her bookstore with books on the theme. That raised the ire of the village's self-righteous. The store suffered vandalism and Nora received threatening messages galore. One of the threats was a pumpkin decorated like a devil's head.

The one who suffered most was a young woman Brenna Leopold, whose body was found in Nora's backyard. The second murder was another Leopold woman.

There were two threads in the plot. A vigilante committee harassed Nora, and a Svengali was taking revenge against the Leopold women. Nora had the usual last-second rescue from the murderer. The anti-Halloween faction more or less faded away.

Halloween Treats.

BOSTON SCREAM MURDER (2020) by Ginger Bolton (pseudonym of Janet Bolton) was a novel in a food cozy series about Emily Westhill of Fallingbrook, Wisconsin. She was the proprietor of the Deputy Donut bakery and an established Miss Marple.

Halloween was nigh and the bakery was selling Boston Scream doughnuts. Thick fudge topping with Munch's famous Scream face for decoration. Local resident Rich Royalson ordered three dozen for his 70th birthday party, minus the Scream faces.

When Emily delivered them the next day to his lake house, she found his corpse. Murdered, his skull bashed in with a heavy iron skillet. Royalson had a lot of dark secrets. Not secret was his wife's drowning death 20 years prior in mysterious circumstances.

Emily wasn't sure but she thought she heard a canoeist paddling away in the morning fog. She began Marpleing when not selling jack-o'-lantern doughnuts. The zombie, skull, and black cat doughnuts were also selling well.

Lots of suspects with lots of motives. The killer tried to whack Emily with a pillowcase filled with rock candy but was stymied by a last-second rescuer. Royalson's wife had been the murderer's half-sister, so revenge was the motive.

And so to the recipes appendix, which had only two recipes, one for Boston Scream Donuts and the other for Scare-It Cake Donuts.

Things That Scream In The Night.

"The Banshee's Halloween" by Herminie Templeton Kavanagh was from the anthology WEIRD WOMEN (2020), edited by Lisa Morton and Leslie S. Klinger. The story was from a series about an Irish lad Darby O'Gill, which was the basis of a 1959 Walt Disney movie.

The story was difficult to read because of the thick stage-Irish dialect. Darby was reluctant to go outside on a stormy Halloween night but had to help an ailing woman. As near as I could penetrate the dialect, there were alarums in the night with an old woman by the roadside who might have been a banshee. Begorrah!

**IF YOU AREN'T SQUAMOUS,
THEN WHY ARE YOU TRYING TO BE ELDRITCH?: PART 19**
by Dale Speirs

[Parts 1 to 18 appeared in OPUNTIA's #298, 333, 340, 352, 365, 395, 410, 415, 422, 443, 465, 480, 486, 492, 498, 504, 513, and 530. Issues #22 and 63.1A have related articles on H.P. Lovecraft.]

For The Lovecraftian Who Has Everything.

This bullion coin was issued by the CIT mint of Liechtenstein for the island of Palau. Weight is 3 Troy ounces (93 grammes) of .999 fine silver (99.9% pure), which would be about \$70 at current prices. The coin has a nominal \$20 face value to make it currency and thus illegal to counterfeit.

The reference is www.cit.li/coins/h-p-lovecraft-cthulhu-mythos The coin has sold out, so you would have to try a coin dealer on the secondary market.



For No One's Reading List.

"The Guardian Of The Book" by Henry Hasse (1937 March, WEIRD TALES, available as a free pdf from www.archive.org) began with Dr Wycherly strolling about when he saw a hole-in-the-wall bookstore. The proprietor was eldritch but knew what his customer would be interested in.

"What of the Necronomicon," he said, "that most fearsome and most hinted-at of all the forbidden books: you would give much for a glimpse into that?"
"That," I smiled, "is even beyond my fondest hope!"

"And if I were to tell you that I have here in this very shop the original Necronomicon?"
I did not bat an eyelash. "You haven't", I stated positively.
He looked not at me, but beyond me.

"True, I have not," he said at last. "I thought you would consider that statement an absurdity." He sighed, then went on a bit hurriedly: "And yet I wonder if you can imagine an even greater absurdity, a book even more terrible than the dreaded Necronomicon, a book so ominous in its scope as to make the Necronomicon seem as tame as, as, "

"As a cook-book," I supplied jocularly, for the tiny man had become almost amusingly solemn and serious now.

"Yes. A book that tells of things the mad Arab never dreamed of in his wildest nightmares; indeed, a book not even of this Earth; a book that goes back to the very beginning and beyond the beginning; that comes from the very minds of the things that caused all things!"

I looked at him with a sudden suspicion, then smiled cynically. "Are you trying to tell me that you do not have the Necronomicon but you do have such a book as you describe?"

His eyes held mine for a moment, and just for that moment there was a gleam in them. Said he: "Do you dare to let me show you?"
Said I: "Yes, do show me, by all means!"

So the bookseller did. He said he was the guardian of the book but was willing to loan it to Wycherly out of the goodness of his heart. Sure he was. Once at home, Wycherly began reading the book. It was in a strange script which twisted about as he tried to read it, then suddenly turned the text into English.

At that point, a story within a story began, told in the preface of the book. There was great detail about how the book came to be in other realms of the universe, and of the Outer Ones, who were evil because, well, they were evil.

The bookseller suddenly appeared in Wycherly's house and went into an extended monologue about the book, part of which left no doubt this was the Cthulhu Mythos:

"Why, you have not even thought to connect that 'Kathulhn' mentioned in the Preface with that tentacled and ever-damned Kthulhu reputed to have come to Earth eons ago by way of the planet Saturn to which it had previously fled from depths beyond your solar system.

"You can know whence obscure and loathsome Tsathoquah came, and why, and other obscenities of subhuman legend hinted at in your Necronomicon and other forbidden books."

"N'hyarlothatep, and Hastur, and the abominable Mi-Go; frightful and omniscient Yok-Zothoth, ponderous and proboscidian Chaugnar Faugn, and Beh'Moth the Devourer. You will converse with the Whisperer in Darkness."

"You will know the meaning of the Affair that shambleth in the stars, and will behold the hunters from Beyond. You will learn the very source of those Hounds of Tindalos who dwell in a chaotic, nebular universe at the very rim of space, and who are in league with those Outer Ones."

"All of these things, with which you are vaguely familiar through your readings, will you know and much more."

Wycherly survived eldritch alarms and narrowly evaded being sucked out into the space between dimensions. The book and the shopkeeper vanished, and so did the bookstore. Beware of hole-in-the-wall shops.

"The Terrible Parchment" by Manly Wade Wellman (1937 August, WEIRD TALES, available as a free pdf from www.archive.org) was fan fiction, a self-referential story about the author and other HPL acolytes. The narrator received a strange advance copy of WEIRD TALES which appeared to have a page of the NECRONOMICON inserted into it by supernatural happenstance.

The parchment seemed alive. The text of the page was originally in Arabic but as Wellman and his wife Gwen discussed it, the language changed to English. They left it sitting and went to bed, but later that night it came into their bedroom like a malevolent inchworm.

Wellman tossed the page into a metal wastebasket, threw some scrap paper in, and tried to burn it. The flames made no impression. Gwen called a local priest and asked him to hurry over with some holy water, which did the trick.

The Post-HPL Mythos.

Most of what passes for the Cthulhu Mythos was created after H.P. Lovecraft's death by his acolyte August Derleth and subsequent pastiche writers down through the decades.

However, even during HPL's lifetime, many writers were using his concepts in their stories, with his permission. The pastiches did not necessarily use the same characters and settings, but their ambience was definitely Lovecraftian.

A Mythos example, published just after Lovecraft's death, was "The Creeper In The Crypt" by Robert Bloch (1937 July, WEIRD TALES, available as a free pdf from www.archive.org). Gangster Joe Regetti and three of his henchmen were on the lam from the law and decided to hole up in Arkham.

The narrator was an Arkham resident of independent means who was kidnapped by the gang and held for ransom. They kept him in the cellar of an old house whose previous inhabitants tended to disappear without explanation.

The explanation came this time in the dark. A slithering sound of something creeping across the floor, a scream as Regetti was gnawed to death, and a burbling sound afterward.

"The Innsmouth Nook" by A. Lee Martinez was from the anthology DEATH'S EXCELLENT VACATION (2010), edited by Charlene Harris and Toni L.P. Kelner. The setting was a bed-and-breakfast in Clam Bay, where even Jessica Fletcher feared to tread. Philip and Vance operated the establishment but no tourists traveled to the always damp and gloomy village. There were no attractions, natural or historic.

What did arrive was a group of batrachian creatures with tentacles on their heads. They were tourists of a sort, paying with fresh fish and pirate treasures gleaned from the deeps.

Clam Bay, it transpired, had previously been known as Innsmouth, but the village folk changed the name to avoid bad publicity. The creatures were

Innsmouthians who had long ago reverted to an amphibious life but wanted to visit the home town. Eldritch life can be as nostalgic as humans.

WEIRD FICTION: PART 7

by Dale Speirs

[Parts 1 to 6 appeared in OPUNTIA's #412, 458, 484, 493, 501, and 511.]

The old-time radio shows mentioned here are available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

The Next Life.

THE HERMIT'S CAVE was an anthology weird fiction radio series that first began airing in 1937 September until circa 1944. There were 800 episodes but only a few dozen have been preserved. Writers were not credited.

The stories were introduced by the Hermit, who giggled as he introduced the episodes. A poor man's creaking door, you might say. Lots of wolves howling in the background.

This was an unusual syndicated series. Instead of selling disks of episodes to be played on the air by independent radio stations, scripts by uncredited writers were sold. Each station then produced the episodes with local actors. A few transcribed them to disks and some fans recorded them off the air with wire recorders.

"The Black Band" was about Jan Van Dirk, a Dutchman adrift in France during the revolution. The atrocities he saw on the streets affected him severely. He was a university student and spent most of his time in the library to escape the tumult outside.

One dark and stormy night, he was walking home across the square where the executions were carried out. He saw a woman sitting on the bottom step of the guillotine, weeping for her loved ones who had died there.

Van Dirk offered her shelter. She was wearing a black band decorated with diamonds around her throat. She said her name was Marie. He offered her marriage and told her that as the wife of a Netherlander the revolutionaries couldn't touch her. The marriage was performed by a local priest that night.

The next day, Van Dirk went out into the country to find a villa for rent. Upon his return, he found her dead. The policeman who responded recognized her as an aristocrat who had been beheaded the day before.

The officer removed the black band and her head rolled away. Van Dirk and the priest who performed the marriage were the only ones who saw her alive after her execution.

"Mystery Of The Strange Thing" began with Dr John Forasteer's wife Dawn going missing. Her clothes were found in a cemetery. The back story was that she had been an amnesia patient he had married. She had been discovered wandering in a park at sunrise, so was given the name Dawn.

John announced to the press that he had found a letter from Dawn, which he read out loud, although it was actually narrated in her voice. The missive took up most of the episode. She had been repeatedly visited by a ghostly thing in the rough shape of a human. It remained silent each time and then vanished after a few moments.

After a number of visits, it suddenly attacked her. She managed to defeat it but it became bolder and began sucking the life out of her. The thing eventually tried to force her to come with it. She wrote the thing would absorb her and return her to the grave. The ghost was herself, come to take her back.

Authorities opened the grave closest to where Dawn's clothes had been found. They discovered a skeleton wearing the wedding ring John had given her. The grave was that of Lyla Manton who died suddenly 35 years ago. Her fiancée was David Forasteer, a distant relative of John.

"The Blackness Of Terror" began with an ominous telegram for Marlene and her husband Paul. Her father Terrence was on his death bed. She flashed back to when she was eight. Her father told her that her mother had left the marriage, running away with another man. She grew up in a mansion where she was dominated by her father until she met Paul.

Meanwhile, back at the death bed, Terrence was helpless from a stroke. He was terrorized for some unknown reason beyond the fear of death. An unseen thing no one else could observe was there. A low moan filled the chamber.

Paul located the source of the sound behind a panel in the bedroom. There was a hidden passage that led to a room with two skeletons. Didn't see that coming, did you?

The final twist was that Terrence didn't die but was confined to his bed as an invalid. Each night the ghosts stood at the foot of the bed and tormented him. Almost an Edgar Allan Poe pastiche.

Lights Out, Everybody.

LIGHTS OUT aired from 1934 to 1947, and was an anthology radio series specializing in fantasy, weird fiction, and horror.

“Money, Money, Money” was written by Arch Oboler and aired on 1943-03-30. A sailor named Swede and a deep-sea diver named Tony began the episode with a long conversation about money.

Swede then won a \$3,000 lottery under the name of Farmer, which Tony immediately began scheming to steal. Tony stole the winning ticket, knifed Swede to death, and dumped the body into the water.

Sometime later, Tony's wife told him a sailor named Farmer had come by earlier. Just then, there was a loud knocking at the door. Tony panicked and fired a gunshot through the door. His horrible mistake, for it was a police officer on the other side.

Tony had to flee the country. He ended up on a salvage ship off Ireland, diving for shipwreck treasure. He even bwah-ha!-ha!-ed once after he landed on the sea bed and found the gold.

As the listener will have anticipated, Swede was waiting for him. The crew pulled Tony back up to the surface but the diving suit was empty. There was a bar of gold tied to the line.

“Heavenly Jeep” aired on 1943-05-04 and was written by Arch Oboler. A captain and a sergeant driver were on a road somewhere in Africa during the war. (Note the date of broadcast.)

They chatted as they motored along. The sergeant said he had been a plumber in civilian life, to which the captain replied he had been a palaeontologist.

Their conversation was interrupted when the captain wondered if they were on the proper road. The track suddenly didn't look right, and the sergeant worried about land mines. But the big fool said to push on. The sound of an explosion. The two men found themselves sitting by the side of the road and the jeep blown apart.

They chatted about the night stars and space travel as they gathered their strength. A German fighter plane rudely interrupted the conversation and strafed them. Their souls found themselves looking down on their bodies. The captain said it was possible to drift out into space and visit the stars.

As they contemplated their next life, the episode cut to a commercial with a tearful woman who said she was always tired and losing weight. The announcer soothed her by telling her about Ironized Yeast Tablets.

The captain and the sergeant found the soul of a woman Ann, killed by an air raid bomb in her hometown. Not the same woman as in the commercial. All three were bound for the same star.

They landed in a new world much like Earth. The people of the world paid no attention to them, as if they didn't exist. Nor did the giant ant that was feeding the inhabitants.

The sergeant became hysterical, and insisted he wasn't dead. His voice faded out and he woke up in a base hospital. The captain was, however, dead and buried alongside the road. He had pushed on to the next life.

“State Executioner” was written by Arch Oboler and aired on 1943-08-17. Samuel Jones was a hangman in the time of King George 3rd. The story was told in flashback as he sat alone in a room. His wife had left him.

During his two decades in the job, he carried out 777 hangings at 5 guineas each. A guinea was a gold coin no longer minted but worth £1.05 back in the

day. The coin contained 7.7 grammes of gold and in today's depreciated currency is worth about \$375 each. In KG3's day, 777 x 5 guineas was an incredible fortune.

Jones was consumed with guilt because he hanged an innocent man. He had found proof of innocence but wanted the 5 guineas. The ghosts of relatives swarmed him and would not give him peace. He went mad and shot himself. Not an episode to listen to on a rainy Sunday afternoon when feeling depressed.

“Mirage” was written by Arch Oboler and aired on 1943-09-21. Linda and Karl were strolling on the moonlit beach. She lectured him about spending too much time on his business. He told her not to spend all her time partying.

The moon suddenly went out. They saw an old man on the beach writing on the sand. The moon reappeared and they saw him writing names and dates. They accosted him but he did not answer.

They saw Karl's name in full in the sand. How did the old man know? The man erased the name and Karl fainted. He recovered momentarily. The situation repeated with Linda.

They gave chase but he kept vanishing and then reappearing further down the beach. Karl tried to come up with a rationalized explanation. They felt strange. Then they saw their names again in the sand with dates beside them.

The dates were sometime in the future. They realized they now knew when they were going to die. Linda began babbling about wanting a child. Karl resolved to travel and see the world before he died. Since they knew when they were going to die, they could plan their lives. An orchestra cut in (a rarity in this series) and so to a brighter tomorrow.

“The Immortal Gentleman” was written by Arch Oboler and aired on 1943-08-31. Most people don't know what to do with themselves on a rainy Sunday afternoon with nothing to do, yet yearn for immortality. This episode considered the consequences of eternal life.

The unnamed narrator explained he had lived in fear of death as a young man. He somehow shifted into another timeline where a speaker was ranting about building a new world. He met a woman who said she was 400 years old and tired of waiting. The narrator thought he was dead and in the afterlife.

There was a lottery, at which the narrator and the woman drew numbers. Everyone else was an immortal clone. He was an avatar. The crowd was angry not at him but something else.

The clones were bored and tired of life. The world was governed by elders who granted eternal life but wouldn't let the clones go into space. There was nothing for them to do.

Tonight was going to be the revolution. The elders would go up against the wall. But it was only a dream. The narrator woke up in his own time. Nothing was resolved. Boo, hiss.

Shhh!

QUIET PLEASE was a radio anthology series that aired from 1947 to 1949. Episodes ranged from mystery to fantasy to weird fiction. Some episodes are available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary.

Ernest Chappell was the narrator, assisted by one or two supporting actors. He had a rich voice that compelled attention.

“Some People Don't Die” was written by Wyllis Cooper and aired on 1947-12-08. The narrator was Huey Lancaster, an archaeologist interested in prehistoric cliff dwellers.

He, his wife Muriel, and an Hispanic assistant Hermeen were at a site in southwestern USA. Hermeen got panicky about ghosts and fled the scene. Huey followed him a short distance to remonstrate with Hermeen but was unsuccessful.

Returning to the site, Huey found Muriel was missing. He climbed up the cliff and began exploring the caves to find her. A ghostly presence appeared but wasn't too helpful. Nonetheless he was reunited with Muriel. The couple were told they would never die. The mummified remains of a Spanish conquistador lying in a corner of the cave then sat up and verified the ghost's claim.

From that point, the plot dwindled away. They would spend eternity there for some unknown reason at the behest of unknown aliens. End of story.

“13 And 8” was written by Wyllis Cooper and aired on 1948-04-26. The narrator Rocco was a newspaper photographer, usually accompanied by his apprentice Buzz.

He explained that “13 and 8” was a warning between press photographers to watch out for some bystander trying to get his picture in the newspaper by cutting in front of the camera. Today we would call it photo bombing.

The problem Rocco had was that the same man kept cutting in, yet never appeared in the photos. Other photographers thought Rocco was trying to distract them and get an exclusive photo while they were looking around for the photo bomber.

Like the boy who cried wolf too often, Rocco had similar trouble. No one else ever saw the interloper. Finally he managed to photograph the man, or at least some of him, for the man was transparent. Then another photographer had the same problem.

The next twist was when Rocco was sent to cover a streetcar wreck. Not until the picture was developed did he see a body underneath. The face was Buzz. The ending was ambiguous. Buzz was sent out on a story to the streetcar barns. Ominous music played that might have meant something. End credits. No further explanation.

Ghosts And Things That Go Bump In The Night.

“The Interview” by H. Sivia (1937 July, WEIRD TALES, available as a free pdf from www.archive.org) concerned a newspaper reporter Dave French sent out to interview a young playboy millionaire.

Judson Vandervere had just come into his inheritance. He was reckless and had been run in by police on several occasions for misdemeanors and traffic offences.

French managed to gain entrance to the mansion. Vandervere was abnormally pale white as was his manservant, and both had untreated injuries. The young man gave a lengthy interview and said he had reformed and would nevermore be the wild man.

Back at the editorial office, French was fired by his editor for fraud. A news report had just come in saying that Vandervere and his servant had been killed in a car crash several hours before the alleged interview. French had been talking to ghosts but no one would believe him.

From the bargain bin of a local video store in Calgary came the DVD of the 2021 movie GHOSTBUSTERS: AFTERLIFE. The plot was rehashed, the special effects were good, but what caught my eye was the scenery. All the location shots were filmed in southern Alberta.

The southern half of the province is popular with many Hollywood studios not just because of cheaper production costs but also because of the varied scenery within a few hours drive of Calgary.

The Rocky Mountains are a half-hour drive west of Calgary. The rolling foothills are north and south along Highway 2 which runs through the centre of Calgary. The desert flatlands are an hour east and southeast of the city, and the Red Deer River badlands are two hours drive east-northeast.

A popular site is Fort Macleod, two hours south of Calgary on the highway. The town went bankrupt during the Great Depression and as a result no new buildings were constructed until the 1960s. The place is ideal for movies set in the 1940s or 1950s because almost all the buildings date from those decades.

Watching this movie was quite enjoyable for me. I’ve done a lot of traveling throughout southern Alberta and know the land well. Ostensibly set in rural Oklahoma, the scenery is mostly the badlands north of Drumheller.

I recognized many of the Fort Macleod buildings. If you want to know what southern Alberta looks like out on the land, this movie will give a good idea.

As for the ghosts, if you saw GHOSTBUSTERS 2, then you’ve seen the special effects in this movie. Instead of New York City ravaged by ghosts, it was rural Oklahoma ravaged by ghostbusters. The main humour of the movie was that the ghostbusters with their proton beams did more damage than the actual ghosts.

DARK FANTASY was an old-time radio anthology series with 31 episodes aired from 1941 to 1942. Unusual for the times, it was a national show on the NBC network aired out of Oklahoma City.

All the episodes were written by Scott Bishop. They were a mixture of science fiction, fantasy, weird, and twist mysteries.

“Debt From The Past” aired on 1942-01-16. Mary Billings was experiencing hard times. She was helped out by her boyfriend Martin, who drew her attention to a job on the midnight shift advertised in a newspaper.

She arrived at the office building and was hired by Mr Gibson. He requested she wear long sleeves and long skirt, and eschew cosmetics. He and the receptionist both insisted it was 1912, thirty years past.

At the end of the shift, she was given a paycheque for \$80, a month’s wage. Telling Martin about the night, they went to the building and found the place long vacant. Further investigation revealed that in 1912, Mary’s mother had worked for the company, which went bankrupt.

The owner Mr Gibson had told his employees he would pay them their lost wages as soon as he could. Thirty years later, his ghost made good the debt.

“Dead Hands Reaching” aired on 1942-05-22. A ghostly voice talked to Allan in his office, telling him to apply for an unadvertised promotion. He did and got the job.

His girlfriend Judith ditched him. The ghostly voice told him not to kill her. He didn’t. She told him she was marrying a man from South America. Later, he reconsidered, went back, and shot her dead.

He became an alcoholic from the guilt, lost his job, and continued to ignore the voice. Another voice counseled him to relax with an opium smoke while lying in bed.

Allan died in the fire and found himself in an ethereal limbo, reading his great-grandfather’s diary. The passages in the book led him to buried gold in an old barn.

With the aid of a rube, the gold was hauled out. The voice returned. Hauling out the gold, the two men found a grave with the hands reaching out. His great-grandfather’s grave. Allan was trapped in limbo.

Haunted Things.

“The Risible Rocker” by Erskine M. Hamilton (1911 August, THE BLACK CAT, available as a free pdf from www.archive.org) was about a pirate who quit the trade after being haunted by a rocking chair. Captain Peters was a freelance pirate who sailed without a letter of marque.

One day his ship overhauled a small freighter. Going on board they didn’t find much. Below decks, Peters saw an elderly woman knitting. She bade him sit in an antique rocking chair decorated with mystical symbols. When he did so, he became helpless with laughter and unable to get out of the chair.

The woman told him that the chair was cursed. On his word of honour to leave her ship alone and depart, she told him the story. The only way to escape was to have his crew carry him in the chair to his ship. Once on board, he would become the new owner and immune to the chair. However, the next person who sat in it would be similarly afflicted.

Thus the thing was done. Sometime later, Peters’ ship was intercepted by a British warship. The admiral came on board, ready to hang Peters. The pirate bade him sit in the chair, and pulled the same stunt on him.

As to what happened to the chair, the Admiral took it back to England where it mouldered in an attic for years before finally being given to a museum. Peters repented after his narrow escape and returned home to Connecticut, a sadder and wiser man.

THE CBS RADIO MYSTERY THEATER aired from 1974 to 1982, an attempt to revive radio drama. The series struggled because the battle had long been lost to television.

“The Onyx Eye” aired on 1975-08-01 and was written by Sidney Sloan. Jack Evans bought his pregnant wife Kathy an onyx object in a hole-in-the-wall shop. She didn’t like it but Jack had been assured it would bring good luck.

The stone seemed to work. Jack got a new job and paid off his debts and back rent. He bought a lottery ticket on halves with a neighbour Mrs Marga. Everything was going well until Kathy suffered a stillbirth. She blamed the onyx eye. Jack realized that the stone was a soul stealer which demanded payment for its services.

Jack tried to return the stone but a local resident told him the shop had closed decades before. But he did win the \$250,000 lottery, shared half with Marga. At Kathy's insistence, Jack gave the onyx eye to Marga.

The eye disappeared from the Marga apartment and reappeared on the Evans' doorstep. That night Jack woke up from a nightmare about the onyx eye, that he would be stuck with the stone forever.

Moments later he got a telephone call from Marga. Her husband had just died in hospital. Marga later buried the eye in the cemetery. Mysteriously, a parcel was delivered to the Evans a few days later. The package contained the onyx eye.

Jack smashed it and threw the pieces out in the harbour. The lottery ticket turned out to be a forgery. Jack lost his job because the company name had been mentioned in the scandal. Kathy was told by her doctor she could never have any more children.

Then the onyx eye reappeared, intact and shiny. A newspaper reporter took up Jack's cause, pointing out that he had bought the ticket in good faith. A campaign was started against his company, demanding they apologize and rehire him. Jack then got his job back.

The reporter saw the onyx eye and offered to buy the stone. Jack remembered the shopkeeper saying the stone could only transfer if someone paid for it. The deal was done and the reporter raced off, gloating over the onyx eye. "*May the Lord have mercy on your soul*", said Jack.

INNER SANCTUM MYSTERIES was an old-time radio anthology series that aired from 1941 to 1952. The episodes ranged from mystery to fantasy to horror. The host was a smarmy man who liked to make ghoulish puns. The opening sequence was the famous sound of an old door loudly creaking open.

"The Skull That Walked" aired on 1944-04-15, no writer credited. Certainly an interesting title, eldritch if ever there was one.

The brothers Arthur and Karl (wife Lucille) Cruise had an estate on a hill. The married couple decided to plant some Lombardy poplars. Their caretaker Speers warned them the area was a burial ground of an ancient native tribe but they said pish-posh.

They found a skull but no skeleton. Curse? What curse? Karl decided to keep the skull but told the others not to mention it to Arthur, who was getting over a nervous breakdown. Hardly had those words been said when a scream resounded from the big house.

Racing back, they found Speers' wife Mary lying dead on the ground. That was certainly a fast-acting curse. She had been cleaning a window when she fell. Sometime later, presumably after Mary's mortal remains were properly dealt with, they heard a thumping sound from upstairs. Then a rattling noise came, and the skull tumbled down the stairs.

Arthur promptly went into hysteria. Karl ignored Lucille's advice to rebury the skull. He didn't believe in all that tommyrot about ghosts (his phrase), and locked the skull in a closet. That didn't stop it from perambulating around the house. "*We're all going to die!*", bleated Arthur. He was good at bleating.

An hour later, Arthur and Lucille said they were going leave unless the skull was reburied. Speers and Karl did the job, in the same place they found it. Back at the house, they tried to relax with a game of bridge. The wind came up suddenly. Someone knocked on the door. The skull was back.

Lucille accused Speers of setting up the prank. She went out to the burial site and found a trowel. She threatened to turn it over to the police to check for fingerprints. At the point of a gun, she extracted a confession from him.

Speers' first wife Jane had disappeared years ago. He had killed her. When her skull was found, he tried to fake up a haunting to scare the Cruises away. Lucille then admitted that she set up the second part of the skull's travels because she wanted to frighten Arthur to death and gain control of the estate.

She and Speers agreed to compromise and work as partners. They went back out to rebury the skull. After redigging the hole yet again, he reached for the skull.

The skull bit him and clamped down hard on his hand, refusing to let go. Lucille went insane and Speers died of fright. And so to the organ music and the squeaking door.

Anthologies.

WEIRD WOMEN (2020) was an anthology of 21 stories edited by Lisa Morton and Leslie S. Klinger. The subtitle explained the theme of the book: “Classic supernatural fiction by groundbreaking female writers 1852-1923”.

The writing style of this era was noticeably different than today. Every noun had a purple adjective. Every phenomenon was described in great detail. Slow reading for the modern reader.

To pick two stories (others will be reviewed in thematic columns elsewhere in this zine), I begin with “The Moonstone Mass” (1868) by Harriet Prescott Spofford. The narrator was a young man who went adventuring to the North Pole in an era when nothing was known about it.

He was stranded by accident on an ice floe. The aurora borealis ran wild, and every scrap of metal he had, including his watch, was magnetized. The ice swirled down into an immense cavity. He saw a mass of moonstone** worth a fortune could he but reach it and carry it home.

Alas, the ice field heaved him back up to the surface. He was eventually rescued with no proof of his experiences.

“The Pocket Hunter’s Story” (1909) by Mary Austin was about prospectors looking for small deposits of ore known as pockets. One of them died out on the land but refused to stay dead. Such stubbornness caused great trepidation among the others, as one might expect.

** Moonstone is an opalescent feldspar with a milky light blue colour, even today an expensive gemstone.

WHEN WORDS COLLIDE 2023

by Randy McCharles

[When Words Collide is Calgary’s annual readercon.]

The past three years we have had to cancel our in-person festival due to COVID-19 and hold it online. While the upside of this is that presenters and attendees could participate from the comfort of their couches, I know we all miss the networking, meet-ups with friends, and book signings that only an in-person event can provide.

While we were not confident that an in-person festival this year would meet our and our attendees’ expectations, and was perhaps too soon after the worst of the pandemic, we are confident that August 2023 is the time. Registration will open soon.

When Words Collide 2023
www.whenwordscollide.org

August 4 to 6, 2023
Delta Calgary South Hotel
Guests TBA

While not everyone will be comfortable attending an indoor event even next year, we believe the festival will be safe for those in good health who are fully vaccinated. Closer to the festival, we will check with health professionals for their current recommendations regarding masks, etc., but we are determined to once again have an in-person get-together.

While those who have an in-person pass or banquet ticket forwarded from 2020 or 2021 are already registered for 2023, we are still determining what the allowable attendance cap will be next summer. Stay tuned over the coming weeks for guest announcements, our official festival poster, and for when registration will open for remaining passes.

[Comment by Dale Speirs: Influenza never went away after the 1918 pandemic and COVID-19 will be with us for centuries to come. Calgarians have resumed normal life as it was before the pandemic and by 2023 anyone who fears COVID-19 is being unnecessarily alarmist. Keep your vaccinations up to date.]

Astronomy.

Gysembergh, V., et al (2022) **New evidence for Hipparchus’ Star Catalogue revealed by multispectral imaging.** JOURNAL FOR THE HISTORY OF ASTRONOMY 53:doi.org/10.1177/00218286221128289 (available as a free pdf)

Authors’ abstract: *New evidence for ancient Greek astronomer Hipparchus’ lost Star Catalogue has come to light thanks to multispectral imaging of a palimpsest manuscript and subsequent decipherment and interpretation.*

This new evidence is the most authoritative to date and allows major progress in the reconstruction of Hipparchus’ Star Catalogue.

In particular, it confirms that the Star Catalogue was originally composed in equatorial coordinates. It also confirms that Ptolemy’s Star Catalogue was not based solely on data from Hipparchus’ Catalogue.

Finally, the available numerical evidence is consistent with an accuracy within 1° of the real stellar coordinates, which would make Hipparchus’ Catalogue significantly more accurate than his successor Claudius Ptolemy’s.

[Images are from this paper.]

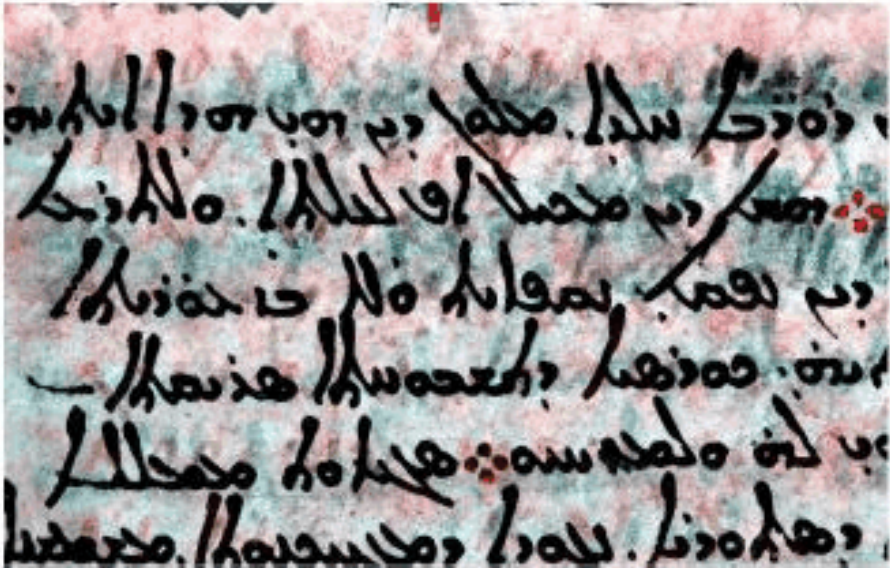


Figure 2. Detail of f. 53v (multispectral image, by the Early Manuscripts Electronic Library and the Lazarus Project of the University of Rochester processed by Keith T. Knox: the enhanced Greek undertext appears in red below the Syriac overtext in black). Courtesy Museum of the Bible Collection. All rights reserved. © Museum of the Bible, 2021.

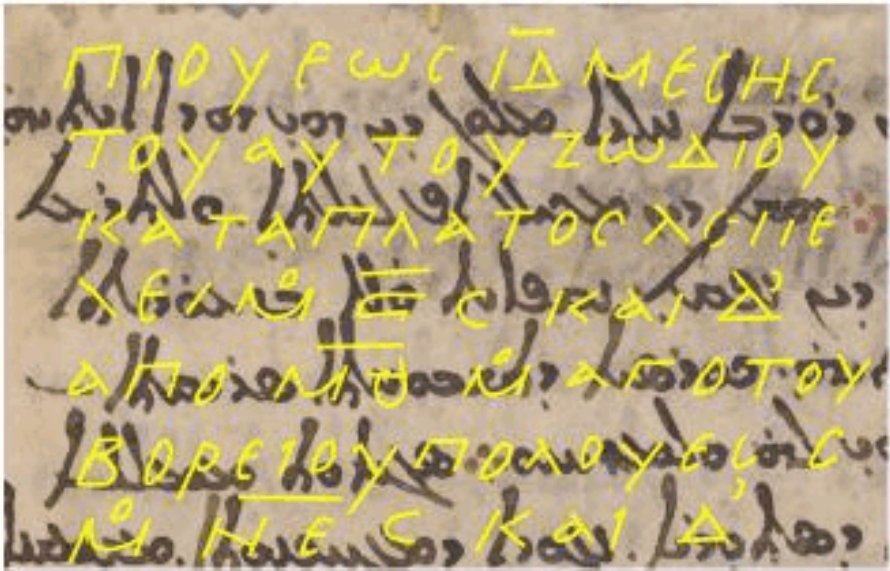


Figure 3. Detail of f. 53v (yellow tracings based on full set of multispectral images). Courtesy Museum of the Bible Collection. All rights reserved. © Museum of the Bible, 2021.

Blum, A.S. (2022) **Einstein’s second-biggest blunder: the mistake in the 1936 gravitational-wave manuscript of Albert Einstein and Nathan Rosen.** ARCHIVE FOR HISTORY OF EXACT SCIENCES 76:doi.org/10.1007/s00407-022-00295-6 (available as a free pdf)

Authors’ abstract: *In a 1936 manuscript submitted to the Physical Review, Albert Einstein and Nathan Rosen famously claimed that gravitational waves do not exist.*

It has generally been assumed that there was a conceptual error underlying this fallacious claim. It will be shown, through a detailed study of the extant referee report, that this claim was probably only the result of a calculational error, the accidental use of a pathological coordinate transformation.

[Einstein subsequently corrected his error. As we know today from actually detecting them, gravitational waves do exist. This paper discusses the confusion about relativistic waves and how the matter was sorted out.]

Sweeney, D., et al (2022) **The Galactic underworld: The spatial distribution of compact remnants.** MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 516:doi.org/10.1093/mnras/stac2092

[A supernova produces both a massive outward explosion and an implosion creating either a neutron star or black hole depending on circumstances. No explosion is ever perfectly symmetrical. Therefore every supernova produces an unequal distribution which kicks the newly-formed neutron star or black hole and may send it traveling in any direction.]

Authors’ abstract: *We chart the expected Galactic distribution of neutron stars and black holes. These compact remnants of dead stars, the Galactic underworld, are found to exhibit a fundamentally different distribution and structure to the visible Galaxy.*

Compared to the visible Galaxy, concentration into a thin flattened disc structure is much less evident with the scale height more than tripling to 1260 ± 30 parsecs. This difference arises from two primary causes. First, the distribution is in part inherited from the integration over the evolving structure of the Galaxy itself (and hence the changing distribution of the parent stars).

Secondly, an even larger effect arises from the natal kick received by the remnant at the event of its supernova birth. Due to this kick we find 30 per cent of remnants have sufficient kinetic energy to entirely escape the Galactic potential (40 per cent of neutron stars and 2 per cent of black holes) leading to a Galactic mass-loss integrated to the present day of ~ 0.4 per cent of the stellar mass of the Galaxy.

The black hole-neutron star fraction increases near the Galactic centre: a consequence of smaller kick velocities in the former. Our simulated remnant distribution yields probable distances of 19 and 21 parsecs to the nearest neutron star and black hole, respectively, while our nearest probable magnetar lies at 4.2 kiloparsecs.

Although the underworld only contains of order ~ 1 per cent of the Galaxy’s mass, observational signatures and physical traces of its population, such as microlensing, will become increasingly present in data ranging from gravitational wave detectors to high precision surveys from space missions such as Gaia.

Burdge, K.B., et al (2022) **A dense 0.1-solar-mass star in a 51-minute-orbital-period eclipsing binary.** NATURE 610:467-471

Authors’ abstract: *Of more than a thousand known cataclysmic variables (CVs), where a white dwarf is accreting from a hydrogen-rich star, only a dozen have orbital periods below 75 minutes.*

One way to achieve these short periods requires the donor star to have undergone substantial nuclear evolution before interacting with the white dwarf, and it is expected that these objects will transition to helium accretion. These transitional CVs have been proposed as progenitors of helium CVs.

However, no known transitional CV is expected to reach an orbital period short enough to account for most of the helium CV population, leaving the role of this evolutionary pathway unclear.

Here we report observations of ZTF J1813+4251, a 51-minute-orbital-period, fully eclipsing binary system consisting of a star with a temperature comparable to that of the Sun but a density 100 times greater owing to its helium-rich composition, accreting onto a white dwarf.

Phase-resolved spectra, multi-band light curves and the broadband spectral energy distribution allow us to obtain precise and robust constraints on the masses, radii and temperatures of both components.

Evolutionary modelling shows that ZTF J1813+4251 is destined to become a helium CV binary, reaching an orbital period under 20 minutes, rendering ZTF J1813+4251 a previously missing link between helium CV binaries and hydrogen-rich CVs.

Geology.

Ding, L., et al (2022) **Timing and mechanisms of Tibetan Plateau uplift.** NATURE REVIEWS EARTH AND ENVIRONMENT 3:652-667

[In plate tectonics history, India broke loose from Africa and was an island floating northeast for tens of megayears. Sometime just after the dinosaurs died out, India collided with Asia. It is now burrowing underneath Asia, a process called subduction, causing the Himalayan mountains to rise up.]

Authors’ abstract: *The timing of the initial India-Asia collision and the mechanisms that led to the eventual formation of the high (>5 km) Tibetan Plateau remain enigmatic.*

In this review, we describe the spatio-temporal distribution and geodynamic mechanisms of surface uplift in the Tibetan Plateau, based on geologic and palaeo-altimetric constraints.

Localized mountain building was initiated during a Cretaceous microcontinent collision event in central Tibet and ocean-continent convergence in southern Tibet.

Geological data indicate that India began colliding with Asian-affinity rocks 65 to 60 million years ago (Ma). High-elevation (>4 km) east–west mountain belts were established in southern and central Tibet by ~55 Ma and ~45 Ma, respectively.

These mountain belts were separated by about 2 km elevation basins centred on the microcontinent suture in central Tibet, until the basins were uplifted further between ~38 and 29 Ma.

Basin uplift to about 4 km elevation was delayed along the India-Asia suture zone until ~20 Ma, along with that in northern Tibet. Delamination and break-off of the subducted Indian and Asian lithosphere were the dominant mechanisms of surface uplift, with spatial variations controlled by inherited lithospheric heterogeneities.

Future research should explore why surface uplift along suture zones, the loci of the initial collision, was substantially delayed compared with the time of initial collision.

Odom, W.E., et al (2022) **The Pliocene-to-present course of the Tennessee River.** JOURNAL OF GEOLOGY 130:325-333

Authors’ abstract: *The Tennessee River, a primary drainage of the southern Appalachians and significant sediment source for the Gulf of Mexico, is generally considered to be the product of captures that rerouted the river from a more direct gulfward course.*

Sedimentary and genetic evidence indicates that a paleo-Tennessee flowed into the Mobile Basin through the late Miocene, although alternate models propose other redirections of the river.

We constrain the river course’s age by dating terraces near Pickwick, Tennessee, with cosmogenic ²⁶Al/¹⁰Be isochron burial dating. We find that the river’s present path dates to at least the early Pliocene.

[The Pliocene era was 5.33 to 2.58 megayears ago. The river therefore is about 5 million years old in its present course.]

The Origin Of Life.

Krause, A.J., et al (2022) **Extreme variability in atmospheric oxygen levels in the late Precambrian.** SCIENCE ADVANCES 8:doi.org/10.1126/sciadv.abm8191 (available as a free pdf)

Authors’ abstract: *Mapping the history of atmospheric O₂ during the late Precambrian is vital for evaluating potential links to animal evolution. Ancient O₂ levels are often inferred from geochemical analyses of marine sediments,*

leading to the assumption that the Earth experienced a stepwise increase in atmospheric O₂ during the Neoproterozoic.

However, the nature of this hypothesized oxygenation event remains unknown, with suggestions of a more dynamic O₂ history in the oceans and major uncertainty over any direct connection between the marine realm and atmospheric O₂.

Here, we present a continuous quantitative reconstruction of atmospheric O₂ over the past 1.5 billion years using an isotope mass balance approach that combines bulk geochemistry and tectonic recycling rate calculations.

We predict that atmospheric O₂ levels during the Neoproterozoic oscillated between ~1 and ~50% of the present atmospheric level. We conclude that there was no simple unidirectional rise in atmospheric O₂ during the Neoproterozoic, and the first animals evolved against a backdrop of extreme O₂ variability.

Eckford-Soper, L.K., et al (2022) **A case for an active eukaryotic marine biosphere during the Proterozoic era.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 119:doi.org/10.1073/pnas.2122042119

[Eukaryotes are cells with nuclei, which includes all multicellular life. Prokaryotes have the genetic material floating freely inside each cell without a protective nucleus.]

Authors’ abstract: *The microfossil record demonstrates the presence of eukaryotic organisms in the marine ecosystem by about 1,700 million years ago (Ma). Despite this, steranes, a biomarker indicator of eukaryotic organisms, do not appear in the rock record until about 780 megayears, in what is known as the “rise of algae.”*

Before this, it is argued that eukaryotes were minor ecosystem members, with prokaryotes dominating both primary production and ecosystem dynamics. In this view, the rise of algae was possibly sparked by increased nutrient availability supplying the higher nutrient requirements of eukaryotic algae.

Here, we challenge this view. We use a size-based ecosystem model to show that the size distribution of preserved eukaryotic microfossils from 1,700 Ma and

onward required an active eukaryote ecosystem complete with phototrophy, osmotrophy, phagotrophy, and mixotrophy.

Model results suggest that eukaryotes accounted for one-half or more of the living biomass, with eukaryotic algae contributing to about one-half of total marine primary production.

These ecosystems lived with deep-water phosphate levels of at least 10% of modern levels. The general lack of steranes in the pre-780-Ma rock record could be a result of poor preservation.

Paleobiology.

Antunes, G.C., et al (2022) **The rise and fall of the giant stromatolites of the Lower Permian Irati Formation (Paraná Basin, Brazil): A multi-proxy based paleoenvironmental reconstruction.** PALAEOGEOGRAPHY, PALAEOCLIMATOLOGY, PALAEOECOLOGY 606:doi.org/10.1016/j.palaeo.2022.111246

[Stromatolites are mat-forming algae that gradually build up mounds or towers, and were among the earliest fossils found on Earth. They dominated the oceans in the Precambrian before the first herbivores evolved.]

[They still exist today but are only found in hypersaline habitats where grazers can’t survive. The Wikipedia image shown below is of stromatolites in Shark Bay, Australia, one of the few remaining stromatolite habitats.]

Authors’ abstract: *Giant stromatolites are meter-scale laminated carbonate biosedimentary deposits formed by the action of benthic microbiota under very specific conditions. Although occurrences of giant stromatolites are relatively common in Precambrian deposits, the Phanerozoic record is still sparse.*

Here, we carried out an integrated analysis of the Lower Permian Santa Rosa de Viterbo giant stromatolite field, developed in a mixed carbonate-siliciclastic depositional system within a restricted intracontinental basin (Irati Formation, Paraná Basin, Brazil).

Using available and new descriptions of stromatolite morphology and associated facies, we applied a multi-proxy approach based upon

sedimentological, paleontological, geochemical, and isotopic data to develop a detailed paleoenvironmental model for this particular occurrence.

The NE-SW elongated giant stromatolites, of >3 metres in height, >7 metres in length, and >1 metres wide, have variable external shape and internal morphology, indicating changing growth strategy due to variations in the hydrodynamic conditions, bathymetry, and terrigenous input.

Increasing $\delta^{13}\text{C}$ values towards the top of the succession are related to intense microbial activity, increased nutrient supply, and enhanced primary productivity, with the higher $\delta^{13}\text{C}$ values matching the global Permian seawater signal.

Y/Ho and La/La ratios indicate a less restricted setting towards the top of the succession, which is consistent with the increasing water depth recorded by the stromatolite morphology.*

The combination of smooth lamination, exclusively coccoidal microbial community, and fossil content, point to deposition under high (possibly hyper) salinity conditions for most of the succession.



Our data suggests that the existence of stressful conditions (i.e., strong currents and high salinity) protected the benthic microbial communities from predation and favored EPS production, generating the ideal conditions for the growth of giant stromatolites, a very uncommon situation in the Phanerozoic.

[Wikipedia image shows modern-day stromatolites in Shark Bay, Australia. The mounds are stacks of countless layers of algae, each one cell thick. The water is so saline that grazers cannot exist.]

Zoology.

Lempidakis, E., et al (2022) **Pelagic seabirds reduce risk by flying into the eye of the storm.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 119:doi.org/10.1073/pnas.2212925119

Authors’ abstract: Cyclones can cause mass mortality of seabirds, sometimes wrecking thousands of individuals. The few studies to track pelagic seabirds during cyclones show they tend to circumnavigate the strongest winds.

We tracked adult shearwaters in the Sea of Japan over 11 years and found that the response to cyclones varied according to the wind speed and direction. In strong winds, birds that were sandwiched between the storm and mainland Japan flew away from land and toward the eye of the storm, flying within about 30 km of the eye and tracking it for up to 8 hours.

This exposed shearwaters to some of the highest wind speeds near the eye wall (about 21 metres sec⁻¹) but enabled them to avoid strong onshore winds in the storm’s wake. Extreme winds may therefore become a threat when an inability to compensate for drift could lead to forced landings and collisions. Birds may need to know where land is in order to avoid it.

This provides additional selective pressure for a map sense and could explain why juvenile shearwaters, which lack a map sense, instead navigating using a compass heading, are susceptible to being wrecked.

We suggest that the ability to respond to storms is influenced by both flight and navigational capacities. This may become increasingly pertinent due to changes in extreme weather patterns.

Environmental Science.

Manzi, H.P., et al (2022) **Algae: a frontline photosynthetic organism in the microplastic catastrophe.** TRENDS IN PLANT SCIENCE 27:doi.org/10.1016/j.tplants.2022.06.005 (available as a free pdf)

Authors’ abstract: *Recalcitrancy in microplastics (MPs) contributes to white pollution. Bioremediation can remove MPs and facilitate environmental sustainability.*

Although recent studies have been conducted on the interaction of algae and MPs, the role of algae in MP removal with the simultaneous implementation of ‘omics studies has not yet been discussed.

Here, we review the adverse effects of MPs on the environment and possible approaches to remove them from the aquatic environment by using algae. We highlight the mechanism of MP biodegradation, the algal species that have been used, and how these are affected by MPs.

We propose that algomics, characterization of biodegrading enzymes, and genetic engineering could be effective strategies for optimizing MP degradation.

Plastic pollution includes MPs, which has catastrophic impacts on the environment and contributes to the top-ten emerging pollutants in the world. Globally, floatable MPs, >100 micrometres in size, in marine environments are on the order of 12.5 to 125 trillion particles.

The main types of MPs, according to their origin, are primary and secondary MPs. Primary MPs are plastic pieces designed to be small and are generated as nurdles (including glitter and microbeads) used in personal care products or cosmetics.

Secondary MPs are plastic particles (such as road wear, tire abrasion, and films) derived through mechanical fragmentation and photooxidative processes of large plastics. Of the total MPs released into aquatic ecosystems annually, 21% comprises primary MPs, whereas secondary MPs account for the remaining 79%.

MPs have garnered attention because of their hydrophobicity, large specific surface area, and propensity to accumulate inorganic and organic contaminants

and harmful microorganisms. MPs hold and carry toxic substances and, thus, have adverse effects on life once ingested by organisms.

MP removal is challenging because they cannot be collected for recycling or removed after entering freshwater or marine ecosystems. Therefore, the development of techniques to facilitate plastic degradation has sparked increasing research attention.

Zhao, J., et al (2022) **Global airborne bacterial community-interactions with Earth’s microbiomes and anthropogenic activities.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 119:doi.org/10.1073/pnas.2204465119 (available as a free pdf)

Authors’ abstract: *We analyzed the bacterial communities of 370 air particulate samples collected from 63 sites around the world and constructed an airborne bacterial reference catalog with more than 27 million non-redundant 16S ribosomal RNA (rRNA) gene sequences.*

We present their biogeographic pattern and decipher the interlacing of the microbiome co-occurrence network with surface environments of the Earth.

While the total abundance of global airborne bacteria in the troposphere (1.72×10^{24} cells) is 1 to 3 orders of magnitude lower than that of other habitats, the number of bacterial taxa (i.e., richness) in the atmosphere (4.71×10^8 to 3.08×10^9) is comparable to that in the hydrosphere, and its maximum occurs in midlatitude regions, as is also observed in other ecosystems.

The airborne bacterial community harbors a unique set of dominant taxa (24 species); however, its structure appears to be more easily perturbed, due to the more prominent role of stochastic processes in shaping community assembly.

This is corroborated by the major contribution of surface microbiomes to airborne bacteria (averaging 46.3%), while atmospheric conditions such as meteorological factors and air quality also play a role.

Particularly in urban areas, human impacts weaken the relative importance of plant sources of airborne bacteria and elevate the occurrence of potential pathogens from anthropogenic sources.

These findings serve as a key reference for predicting planetary microbiome responses and the health impacts of inhalable microbiomes with future changes in the environment.

Lemieux, A., et al (2022) **Viral spillover risk increases with climate change in High Arctic lake sediments.** PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON 289B:doi.org/10.1098/rspb.2022.1073 (available as a free pdf)

Authors’ abstract: *The host spectrum of viruses is quite diverse, as they can sustainedly infect a few species to several phyla. When confronted with a new host, a virus may even infect it and transmit sustainably in this new host, a process called ‘viral spillover’. However, the risk of such events is difficult to quantify.*

As climate change is rapidly transforming environments, it is becoming critical to quantify the potential for spillovers. To address this issue, we resorted to a metagenomics approach and focused on two environments, soil and lake sediments from Lake Hazen, Nunavut, the largest High Arctic freshwater lake in the world.

We used DNA and RNA sequencing to reconstruct the lake’s virosphere in both its sediments and soils, as well as its range of eukaryotic hosts.

We then estimated the spillover risk by measuring the congruence between the viral and the eukaryotic host phylogenetic trees, and show that spillover risk increases with runoff from glacier melt, a proxy for climate change.

Should climate change also shift species range of potential viral vectors and reservoirs northwards, the High Arctic could become fertile ground for emerging pandemics.

Human Prehistory.

Monson, T.A, et al (2022) **Teeth, prenatal growth rates, and the evolution of human-like pregnancy in later *Homo*.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 119:doi.org/10.1073/pnas.2200689119 (available as a free pdf)

Authors’ abstract: *Humans are characterized by having very large brains relative to body size. Because gestation is critically linked to brain size, pregnancy is an important but elusive aspect of hominid evolution.*

We developed two methods for reconstructing prenatal growth during this earliest phase of life history using brain size and dental morphology.

*Our results indicate a significant increase in prenatal growth rates (PGRs) throughout the terminal Miocene and Plio-Pleistocene with the evolution of human-like PGRs in later *Homo*, less than 1 million years ago.*

These results align with fossilized pelvic and cranial anatomy to support the evolution of human-like pregnancy in the Pleistocene and open up possibilities for novel ways to explore the evolution of hominid gestation via dental variation.

Evidence of how gestational parameters evolved is essential to understanding this fundamental stage of human life. Until now, these data seemed elusive given the skeletal bias of the fossil record.

We demonstrate that dentition provides a window into the life of neonates. Teeth begin to form in utero and are intimately associated with gestational development.

We measured the molar dentition for 608 catarrhine primates and collected data on prenatal growth rate (PGR) and endocranial volume (ECV) for 19 primate genera from the literature.

We found that PGR and ECV are highly correlated. Additionally, we demonstrated that molar proportions are significantly correlated with PGR and log-transformed ECV. From these correlations, we developed two methods for reconstructing PGR in the fossil record, one using ECV and one using molar proportions.

Dental proportions reconstruct hominid ECV, a result that can be extrapolated to PGR. As teeth dominate fossil assemblages, our findings greatly expand our ability to investigate life history in the fossil record. Fossil ECVs and dental measurements from 13 hominid species both support significantly increasing PGR throughout the terminal Miocene and Plio-Pleistocene, reflecting known evolutionary changes.

Together with pelvic and endocranial morphology, reconstructed PGRs indicate the need for increasing maternal energetics during pregnancy over the last 6 million years, reaching a human-like PGR (i.e., more similar to humans than to other extant apes) and ECV in later Homo less than 1 million years ago.

Pretelli, I., et al (2022) **Foraging complexity and the evolution of childhood.** SCIENCE ADVANCES 8:doi.org/10.1126/sciadv.abn9889 (available as a free pdf)

Authors' abstract: Our species' long childhood is hypothesized to have evolved as a period for learning complex foraging skills. Researchers studying the development of foraging proficiency have focused on assessing this hypothesis, yet studies present inconsistent conclusions regarding the connection between foraging skill development and niche complexity.

Here, we leverage published records of child and adolescent foragers from 28 societies to

- (i) quantify how skill-intensive different resources are and*
- (ii) assess whether children's proficiency increases more slowly for more skill-intensive resources.*

We find that foraging returns increase slowly for more skill-intensive, difficult-to-extract resources (tubers and game), consistent with peak productivity attained in adulthood.

Foraging returns for easier-to-extract resources (fruit and fish/shellfish) increase rapidly during childhood, with adult levels of productivity reached by adolescence.

Our findings support the view that long childhoods evolved as an extended period for learning to extract complex resources characteristic of the human foraging niche.

Brami, M., et al (2022) **Was the fishing village of Lepenski Vir built by Europe's first farmers?.** JOURNAL OF WORLD PREHISTORY 35:doi.org/10.1007/s10963-022-09169-9 (available as a free pdf)

Authors' abstract: It is now widely accepted that agriculture and settled village life arrived in Europe as a cultural package, carried by people migrating from Anatolia and the Aegean Basin. The putative fisher-forager site of Lepenski Vir in Serbia has long been acknowledged as an exception to this model.

Here, the Mesolithic-Neolithic transition, possibly inspired by interaction with the new arrivals, was thought to have taken place autochthonously on site.

Our reinterpretation, based on ancient genomes, as well as archaeological and isotopic evidence, indicates that here, too, house construction, early village society and agriculture were primarily associated with Europe's first farmers, thus challenging the long-held view of Lepenski Vir as a Mesolithic community that adopted Neolithic practices.

Although aspects of the site's occupation, such as the trapezoidal houses, were inspired by local Mesolithic traditions, it is far from certain that the village was founded by Iron Gates foragers.

A detailed timeline of population changes at the site suggests that Aegean incomers did not simply integrate into an established Mesolithic society, but rather founded new lineages and households.

Iron Gates foragers and their admixed descendants largely appear to have been buried separately, on the fringes of the settlement. The diet of those buried outside in pits shows no major shift from aquatic to terrestrial food resources.

Klunk, J., et al (2022) **Evolution of immune genes is associated with the Black Death.** NATURE 610:doi.org/10.1038/s41586-022-05349-x

Authors' abstract: Infectious diseases are among the strongest selective pressures driving human evolution. This includes the single greatest mortality event in recorded history, the first outbreak of the second pandemic of plague, commonly called the Black Death, which was caused by the bacterium Yersinia pestis.

This pandemic devastated Afro-Eurasia, killing up to 30 to 50% of the population. To identify loci that may have been under selection during the Black Death, we characterized genetic variation around immune-related genes from 206 ancient DNA extracts, stemming from two different European populations before, during and after the Black Death.

Immune loci are strongly enriched for highly differentiated sites relative to a set of non-immune loci, suggesting positive selection. We identify 245 variants that are highly differentiated within the London dataset, four of which were replicated in an independent cohort from Denmark, and represent the strongest candidates for positive selection.

*The selected allele for one of these variants, rs2549794, is associated with the production of a full-length (versus truncated) ERAP2 transcript, variation in cytokine response to *Y. pestis* and increased ability to control intracellular *Y. pestis* in macrophages.*

Finally, we show that protective variants overlap with alleles that are today associated with increased susceptibility to autoimmune diseases, providing empirical evidence for the role played by past pandemics in shaping present-day susceptibility to disease.

Modern Humans.

Vujovic, N., et al (2022) Late isocaloric eating increases hunger, decreases energy expenditure, and modifies metabolic pathways in adults with overweight and obesity. CELL METABOLISM 34:doi.org/10.1016/j.cmet.2022.09.007 (available as a free pdf)

Authors' abstract: Late eating has been linked to obesity risk. It is unclear whether this is caused by changes in hunger and appetite, energy expenditure, or both, and whether molecular pathways in adipose tissues are involved.

Therefore, we conducted a randomized, controlled, crossover trial to determine the effects of late versus early eating while rigorously controlling for nutrient intake, physical activity, sleep, and light exposure. Late eating increased hunger and altered appetite-regulating hormones, increasing wake time and 24-h ghrelin:leptin ratio. Furthermore, late eating decreased wake time energy expenditure and 24-h core body temperature.

Adipose tissue gene expression analyses showed that late eating altered pathways involved in lipid metabolism, e.g., p38 MAPK signaling, TGF- β signaling, modulation of receptor tyrosine kinases, and autophagy, in a direction consistent with decreased lipolysis/increased adipogenesis.

These findings show converging mechanisms by which late eating may result in positive energy balance and increased obesity risk.

Yamamoto, R., et al (2022) Tissue-specific impacts of aging and genetics on gene expression patterns in humans. NATURE COMMUNICATIONS 13:doi.org/10.1038/s41467-022-33509-0 (available as a free pdf)

Authors' abstract: Age is the primary risk factor for many common human diseases. Here, we quantify the relative contributions of genetics and aging to gene expression patterns across 27 tissues from 948 humans. We show that the predictive power of expression quantitative trait loci is impacted by age in many tissues.

Jointly modelling the contributions of age and genetics to transcript level variation we find expression heritability (h^2) is consistent among tissues while the contribution of aging varies by >20-fold with R^2 age > h^2 in 5 tissues.

We find that while the force of purifying selection is stronger on genes expressed early versus late in life (Medawar's hypothesis), several highly proliferative tissues exhibit the opposite pattern.

These non-Medawarian tissues exhibit high rates of cancer and age-of-expression-associated somatic mutations. In contrast, genes under genetic control are under relaxed constraint.

Together, we demonstrate the distinct roles of aging and genetics on expression phenotypes. As individuals age, many biological processes deteriorate resulting in impaired function and disease.

Such increases in the overall variance of molecular processes are predicted by Medawar's germline mutation accumulation theory, which states that because older individuals are less likely to contribute their genetic information to the next generation, there is reduced selection to eliminate deleterious phenotypes that appear late in life.

This theory also predicts that genes expressed early in life should be under increased selective constraint compared to genes expressed late in life.

However, a key challenge remains in both quantifying age-associated changes in biological processes across tissues and identifying how genetic variation influences such changes.

At the organismal level, age-associated changes in the heterogeneity of gene expression between individuals have been observed for a handful of genes in humans. In an analysis of gene expression in monozygotic (identical) twins, 42 genes showed age-associated differences in gene expression, suggesting a role for the environment in modulating gene expression with age.

Similarly, the number of genes with expression quantitative trait loci detected from blood in 70 year olds declined by 4.7% when they were resampled at 80 years old. However, the extent of this phenomenon, both across genes and tissues, remains unclear.

Age-associated increases in the heterogeneity of gene expression have also been observed at the level of individual cell-to-cell variation; however, only some cell types appear to be impacted. In a recent study of immune T-cells from young and aged individuals, no difference in cell-to-cell variability was observed in unstimulated cells.

However, upon immune activation the older cells appeared more heterogeneous. It is not known why some cell-types and not others may be more likely to exhibit increased cellular variability.

The relationship between the age at which a specific gene is expressed and the force of purifying selection has also recently been explored across a number of species. These analyses have broadly confirmed that, on average, genes expressed later in life are under less constraint compared to those expressed early in life.

RECOMMENDED BY AMAZON

Another recommendation screen while I was browsing through Amazon.ca

←

Q

comedy dvd collection

Vacation Collection (DVD)

Starring Various

★★★★★

1,186

DVD

\$19⁹⁸

Get it by Wednesday, Oct 12

FREE Shipping over \$35 by Amazon

Sponsored

Game of Thrones: The Complete Series Seasons 1-8 DVD (Bilingual - 38 Disc Boxset)

Starring Emilia Clarke

★★★★☆

8,461

DVD

\$86⁷⁵ ~~\$123.73~~

Get it by Wednesday, Oct 12

FREE Shipping by Amazon

Only 4 left in stock.

Sponsored

Seinfeld: The Complete Series Box Set (Bilingual)

★★★★☆

4,058

DVD

\$87⁵⁰

Get it by Wednesday, Oct 12

FREE Shipping by Amazon