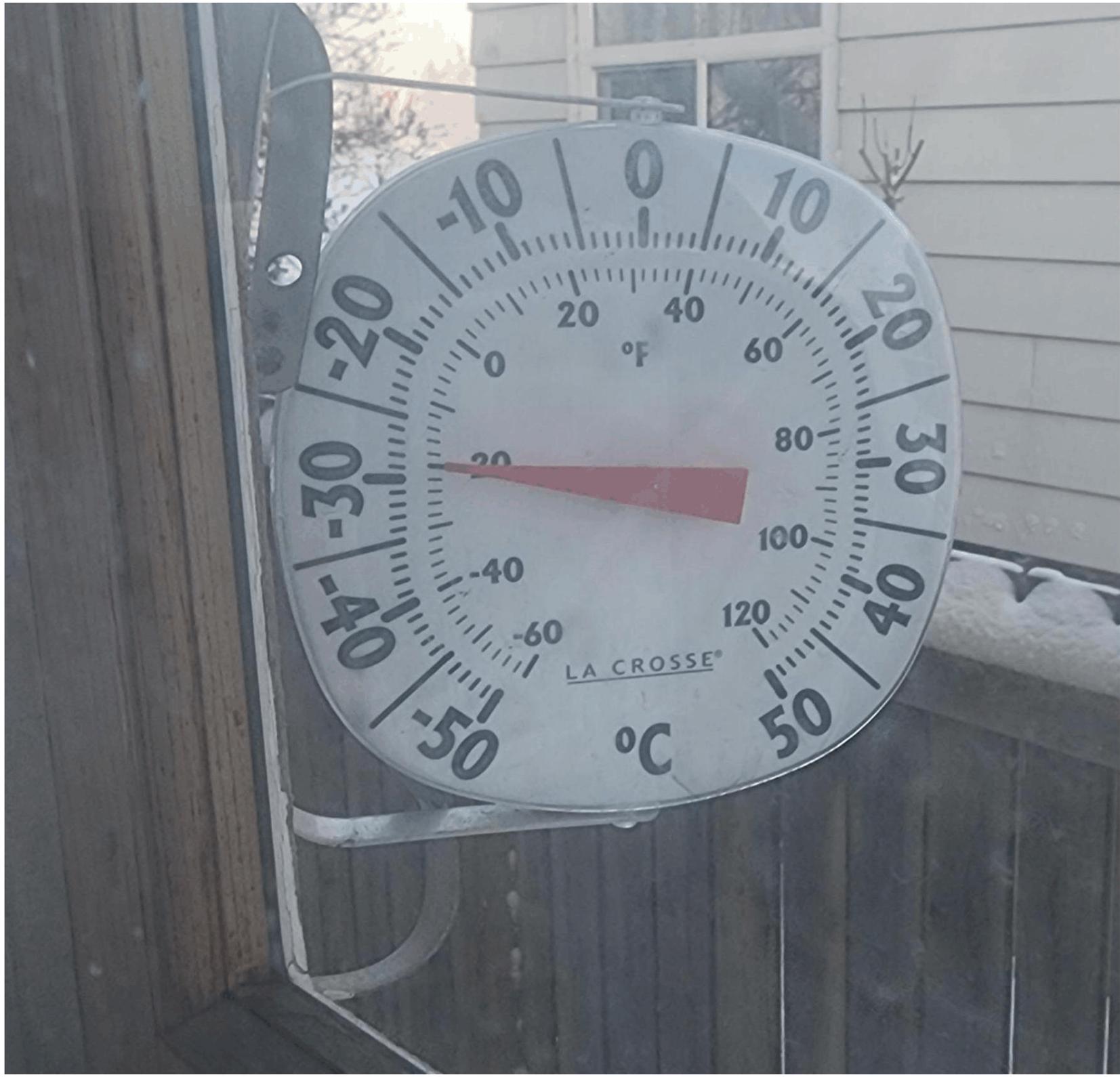


OPUNTIA 564



Edgar Allan Poe's Birthday 2024

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.

BRRRR!!!!

by Dale Speirs

I took the cover photo on January 12, looking out the kitchen window on the north side of the house. The needle didn't move until January 15.

Southern Alberta had a mild winter until January 11, when a polar front moved down from the Arctic. Temperatures had been mild, in the -10°C range, then dropped down to -30° for Calgary's usual week of cold weather each year.

Life carried on though. Bright sunshine and little wind made the -30° tolerable during the day. I left the Opuntiamobile in the driveway and took the bus downtown on errands. Calgary streets had slightly less traffic than usual but daily commerce carried on in the shopping malls and business districts. Humans are the dominant species on this planet because we can adapt to almost anything.

Chez Opuntia is a 1950s bungalow. When I bought the house in 1982, there was no insulation in the attic, so I put down a double layer of fibreglass batting. A cheap and easy job I could do myself

The walls, unfortunately, had antique vermiculite insulation blown inside the wood frames. While paying off the mortgage I couldn't afford to have them up-insulated. Now in later years I could, but the house has become a teardown. To upgrade the insulation would cost \$15,000 to \$20,000, far more than any heating cost savings over the remaining years.

Whoever buys the house from me after I die or go into a nursing home will rip it out and build five townhouses. The house is on a double-wide corner lot, prime redevelopment property. About once a month a developer leaves a letter in my mailbox with an offer to buy. I'm in no hurry to sell because the land will only become more valuable over time. I used to joke that I would have the last bungalow in the neighbourhood but it's not such a joke anymore.

The thermostat was set to 24° but my furnace struggled to keep the temperature above 19° upstairs and in the developed half of the basement where my den and bedroom are. I took a thermometer into the undeveloped half where the temperature was 14°. The furnace ran continuously after the polar front arrived.

As a peculiar matter of psychology, 19°C is a lovely summer's day but in a house is distinctly chilly. I think the reason is that anyone outside is moving about and generating body heat, while in a house one spends most of the time sitting in a chair.

Alberta's electricity supply comes mainly from natural gas generators. Solar power is useless during the dark winters, heat pumps can barely keep a super-insulated house just above freezing, and wind power stops when polar air comes down south because high-pressure ridges have no wind.

On the third night of the cold, which was Saturday, January 13 at 18h45, Alberta Electric System Operator, which pools and distributes electricity in the province, issued a text to all cellphones in the province via the Alberta Emergency Management Agency..

EMERGENCY ALERT / ALERTE D'URGENCE

This is an Alberta Emergency Alert issued by the AEMA. This alert is in effect for AB. Extreme cold resulting in high power demand has placed the Alberta grid at a high risk of rotating power outages this evening. Albertans are asked to immediately limit their electricity use to essential needs only. Turn off unnecessary lights and electrical appliances. Minimize the use of space heaters. Delay use of major power appliances. Delay charging electrical vehicles and plugging in block heaters. Cook with microwave instead of stove. For more info visit the Alberta Electric System Operator website

OK



This site can't be reached

www.aeso.ca refused to connect.

Try:

Checking the connection

ERR_CONNECTION_REFUSED

Reload

Details

I went to the website as suggested in the text message and of course it had crashed.

Alberta has about 4 million people and probably half of us went to the website at 18h46.

A later news report said when the alert was issued, the system was using 12 gigawatts of electricity.

The system was 10 megawatts away from failure. With some luck Alberta was able to buy electricity from adjacent provinces of Saskatchewan and British Columbia and

the adjacent American state of Montana. They were also experiencing the same polar front, but between them managed to spare enough for Alberta. An hour after the text alert, usage dropped to 11 gigawatts, easing concern of rotating blackouts.

Wind and solar power dropped to zero, and only natural gas generators kept going. Alberta has relatively little hydroelectricity since most of the province is flatlands and the environmentalists oppose projects in the mountains. The previous NDP government (labour-socialist) had shut down the coal plants.

Prevailing winds in Alberta are from the north or west. The north winds are dry because they are continental. The west winds bring moisture from the Pacific Ocean but most of that precipitates on the windward sides of the mountains.

As a consequence, southern Alberta doesn't get high humidity in summer or heavy snowfalls in winter. Our snowfalls are seldom more than 15 cm. The polar ridges bring little snow with them. When the current polar front arrived, there was a brief snowfall of a few centimetres. The skies then cleared, which is why the cold was so intense. The ground (and buildings) radiated their heat up into the sky.

My neighbourhood, judging by the kitchen window thermometer, was -30°C. The official Calgary temperature is measured at the airport up on a wind-swept plateau northeast of the city. The airport is always colder than the heat island of the city. The temperature out there was -38°C.

But no matter where you live, there is always something. The day the polar front slid into our province, Florida had heavy rains and a tornado went through Fort Lauderdale. I have a cousin who is a roadworks engineer in southern California. He has a steady job repairing bridges and freeways shaken apart by earthquakes.

The New England states and central Canada get lake-effect snowfalls, the Lower Mainland of British Columbia was hammered by atmospheric rivers, and the central American states have tornado seasons. The Gulf states have 90% humidity and once a decade a hurricane tears the roofs off their houses. There is always something.

Tuesday, January 16, the weather warmed up to -20°C and the crisis ended. That was normal winter and we all resumed our regular routines.

**BOW VALLEY SQUARE ELECTRONIC ART:
PART 8**

photos by Dale Speirs

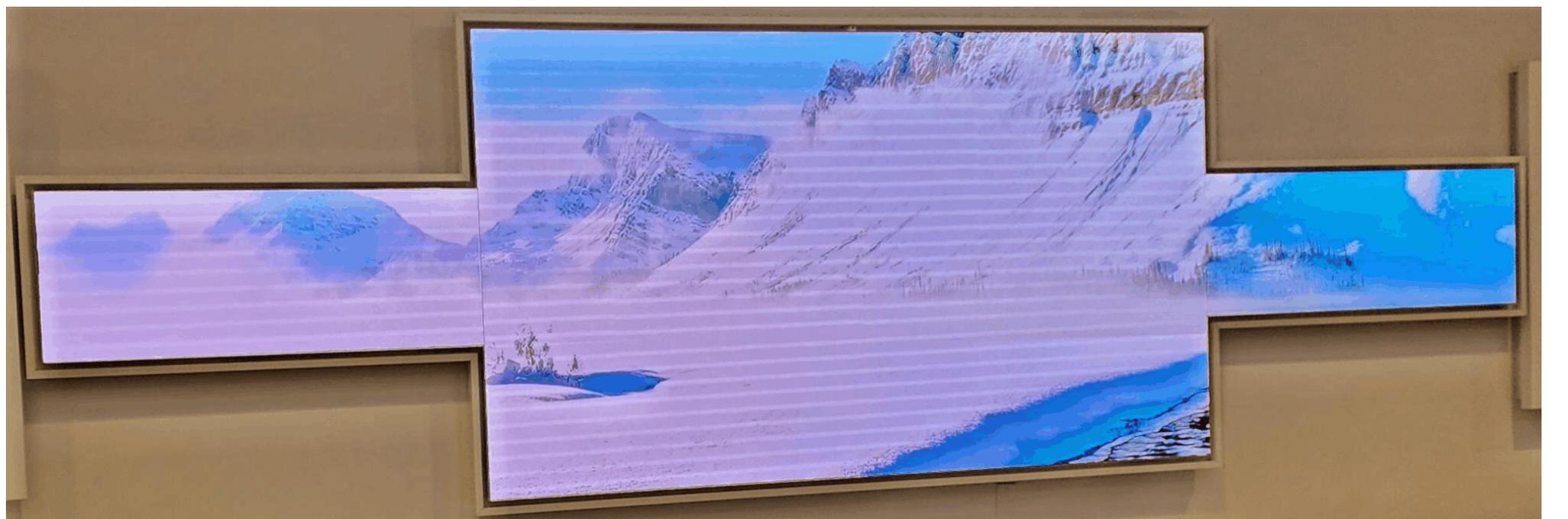
[Parts 1 to 7 appeared in OPUNTIA #487, 490, 516, 527, 536, 549, and 561.]

Bow Valley Square is a cluster of skyscrapers in downtown Calgary linked into the Plus-15 pedestrian system which connects about half the downtown skyscrapers at the second floor with an enclosed pedestrian skywalk.

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.

These winter scenes were photographed at different times over the past two years.





EDGAR GALLOPING POE: PART 10

by Dale Speirs

[Parts 1 to 9 appeared in OPUNTIA's #325, 332, 344, 356, 370, 433, 465, 492, and 516.]

Commentary.

“Fact Meets Fiction In Poe’s “The Black Cat”” by Dean Jobb (2021 Nov/Dec, ELLERY QUEEN MYSTERY MAGAZINE) was a speculative fact article about the possible inspiration for Edgar Allan Poe’s story.

In 1842, a homeowner was expanding his cellar while renovating an old house. Taking out a stone wall, he discovered the skeleton of a woman who had been shot in the head. Nothing about Amontillado though.

Given the antiquity of the house, anyone who put the remains there would have been long gone. The mysterious crime made the newspapers nation-wide, including Philadelphia, where Poe was living at the time. The following year Poe published his story, adding a black cat to betray the murderer who stuffed his wife’s body behind a cellar wall.

Video Poe.

The movie THE RAVEN (1935) borrowed the title and a few fragments of text. The heroine did an interpretive dance about the poem. People quoted a few lines here and there but beyond that the plot had little to do with the poem. The movie did, however, borrow substantially from “The Pit And The Pendulum”.

The credited screenwriter was David Boehm. He was the last man standing after six scripts and seven writers preceded him. This movie is available on the DVD set “Boris Karloff And Bela Lugosi 4 Movie Horror Collection” from Universal Studios. It was one of a series Universal produced in the early 1930s.

In 1934, protests about gory films resulted in the Hays Code, which censored films, particularly horror and erotic. This film just squeaked by, but thereafter Hollywood studios had to restrain cinematographers.

Lugosi played Dr Richard Vollin, a neurosurgeon whose hobby was building torture devices based on Poe’s stories. One of them was the swinging blade on a pendulum, which Vollin put into use.

He had become enamoured of a young woman. Her father objected so Vollin put him under the blade. Also in the plot was Edmond Bateman (Karloff) who had been disfigured by Vollin and was forced to do nasty deeds in the hope of corrective surgery. The final fracas was a fight between Vollin and Bateman inside a torture room whose walls closed in to crush them both.

And so to the credits. What baffled me was why the wrong Poe story was credited, or indeed any specific story. The elements, or perhaps I should say fragments, were there. But that’s Hollywood.

From Rod Serling’s television series NIGHT GALLERY was “The Merciful”, which aired on 1971-09-22. The screenplay was by Jack Laird, based on the story “Soft, Sweet Sleep” by Charles L. Sweeney Jr. His story, as the viewer will quickly recognize, was a twist on Poe’s “The Cask Of Amontillado”.

An elderly woman was building a brick wall in a basement room, her husband sitting in a chair on the other side. He never said a word as she steadily added one brick to another, sealing the wall and separating them forever.

She talked as she mortared each brick in, saying that it was for the best. Better to end life this way than to suffer the pain of the final illness. About halfway through, the viewer will begin to suspect this wasn’t just a straightforward retelling of Poe’s story.

After the wall was completed, the husband sat silently until a doorbell rang. He got out of his chair and the camera panned to show him climbing the stairs. As the viewer suspected, the wife had walled herself in, not her husband. An interesting twist.

Also from NIGHT GALLERY was “Quoth The Raven” was a vignette aired on 1971-12-08 and written by Jack Laird. The actor who played Edgar Allan Poe looked nothing like him, way too plump.

He was trying to write a poem but couldn’t think of the words. However a raven perched in a corner helpfully supplied the lines, much to his irritation.

Cozy Poe.

THE PLOT AND THE PENDULUM (2022) by Jenn McKinlay was a novel in a cozy series about librarian Lindsey Norris of Briar Creek, Connecticut. The

public library received a donation of tens of thousands of rare books from the remnant of the Dorchester family.

Lindsey and her staff gathered at the Dorchester mansion to pack the books. They discovered a bookcase had a secret passage behind it. There was an airtight room wherein lay a skeleton clutching a copy of the collected works of Edgar Allan Poe.

Police determined the deceased was Grace Little, a runaway bride who had gone missing in 1989. Not so long ago that Lindsey couldn't sleuth out the old stories. Everyone back then and still now suspected her husband Tim murdered her but no proof could be brought before the court.

The medical examiner report said Grace had slowly suffocated in the airtight room. Not until Chapter 18 did anyone think to examine the Poe book that Grace's skeleton had been holding. Before her death, she underlined letters in the book that named her murderers.

That vital clue was set aside for a moment to allow someone to shove Lindsey into the death room and leave her there to suffocate like Grace. Since Lindsey was booked for the series, there was no suspense because the reader knew she would soon be rescued.

The underlined letters spelled out the names of the two Dorchesters who trapped Grace in the room. She had time before she died to name them. The motive had been a love triangle gone wrong.

Revival Radio.

Old-time radio was almost completely extinct by 1955 and the last two holdouts ended their runs in 1962. In the 1970s and thereafter, attempts were made to revive radio drama but seldom survived a few months.

The CAPE COD RADIO MYSTERY THEATER began in 1982 on public radio. This amateur group is apparently still trickling along as a podcaster (ccmrt.com). Episodes are available as free downloads from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

"Edgar Allan Crow And The Purloined Purloined Letter" aired in 2003 and was written by Steven Thomas Oney. And no, the title was not a typographical error.

This was an 87-minute episode from a series about private detective Capt. Waverly Underhill (retired police officer). The sound quality was excellent, clear and crisp, in stereo.

The story began at an antiques roadshow. Lots of infodumps about how such shows operated behind the scenes, not to mention about the antiques.

Underhill and his niece Sandy Linnehan were in attendance, as was sharp-practice dealer Augustine Nickleswhite III. The latter was known to police, who called him Augie Nickleswipe, and was the reason Underhill attended.

Twin brothers Errol and Earl Yahtzee had a piece of furniture on consignment with apparent secret compartments. They found a gold bug brooch hidden inside. Engraved on the reverse was a dedication to a lover, signed EP. Also found was a book titled TAMERLANE, holograph letters, and various ephemera.

Those examining the items were baffled, indicating they weren't well educated. Even without the episode title giving away the MacGuffin, the book title and brooch by themselves would have the listener shouting at the radio that the items were from Poe.

Pause for digression. Precious metal investors are known as gold bugs. The term was derived directly from Poe's treasure hunt story "The Gold Bug".

A buzz of excitement erupted. If genuine, the items were worth millions each. A professor was trotted out to provide infodumps on the horde and Poe's biography. Supplemental infodumps were given by roadshow appraisers. Indeed, for about fifteen minutes the story came to a dead stop as characters lectured each other about Poe's life.

The furniture might have belonged to Poe's aunt. A newspaper clipping of Poe's obituary proved that he hadn't assembled the trove himself. Continued searching of secret compartments brought forth a lock of hair and a dead cat, presumably mummified rather than a fresh corpse.

Not a black cat but Poe's pet cat, named Catterina. The listener will not be surprised when a second mummified remain was discovered. Yes, a raven.

Nickleswhite appeared and offered a lowball bid of \$250,000 to the owner, which upset the others. The owner was a dear old lady who was in a tizzy and about to accept. Everyone tried to convince her not to take the bid.

A bidding war erupted and ran the price up to \$500,000. Helms Kregel was the successful bidder. Nickleswhite was a sore loser but to be fair the others were not gracious in victory.

In the aftermath, Underhill revealed that all were acting in a convoluted plot to take revenge against Kregel, who had cheated one of them big time years before. The items were genuine but borrowed from museums without them knowing.

The group figured Kregel would be too embarrassed to admit their fraud against him. The listener will wonder about that. Underhill pointed out the obvious legal liabilities. The conspirators laughed him off.

CONTEMPLATING A CRIME: PART 2

by Dale Speirs

[Part 1 appeared in OPUNTIA #525.]

Peter Lorre did a lot of radio work. He never met a script he couldn't overact. I suspect many movie fans aren't aware of just how often he and other movie stars appeared in radio shows. Available as free downloads from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

Laugh With Lorre.

Many of Lorre's radio appearances were in horror or mystery shows, but he often traded upon his reputation in comedy shows, where all he had to do was show up and go bwah-ha!-ha!

TEXACO STAR THEATER had several hosts, including comedian Fred Allen from 1940 to 1944. The episodes didn't have titles because this was a variety series with a mix of music, comedy, and special guests. The 1943-01-03 episode featured Peter Lorre as a guest.

Before Lorre came on, Allen did some comedy, then a chanteuse sang, and the announcer did a Texaco commercial. Next up was Allen's wife Portland Hoffa (her real name; she was born in the Oregon city), who played second banana.

When Allen told her the guest that night was Lorre, she became nervous. An interloper barged in, reminding everyone that any knives used must be wiped clean of blood before returning.

Without fanfare, Lorre wandered on stage. Hoffa mistook him for a messenger boy (he was a short man) and was astonished to learn he was the guest star. When she introduced him to Allen, he screamed in fear. Allen, while not ugly, was well known for his sour look and baggy eyes.

Allen and Hoffa expressed surprise at Lorre's meek appearance. He assured them he was a quiet fellow in private life, as anyone down at the morgue would testify. He said if it wasn't for him, a lot of people wouldn't know how peaceful the morgue was.

Lorre mentioned that every day he and Boris Karloff gave blood at the Red Cross. "*Doesn't that weaken you?*", asked Allen. "*Oh, it isn't our blood!*", Lorre reassured him. That got a good laugh from the audience.

The two men then performed a skit that would have wokers screaming with rage if it were played today. At that time, Lorre was making a series of Mr Moto movies, playing a Japanese detective.

Hollywood, then and now, is the most racist city in the USA. Back then, any starring roles of Oriental characters were always played by white actors in yellowface makeup. Allen used a stock character in his routines called One Long Pan, a Chinese detective. On radio he didn't have to wear makeup, just do a bad impression of how he and his writers thought Chinese spoke English.

The two men then did a skit with Mr Moto and One Long Pan racing each other to solve a murder. Hoffa, who had a good range of voices, played the female characters. The plot was mostly bad puns in bad dialect. Moto solved the case and showed up One Long Pan.

Moto made the mistake of saying that he could solve any murder. One Long Pan begged to differ and proved his point by pulling out a handgun and shooting Moto dead. That was one case Moto would never solve.

Bob Hope was on radio from 1935 until 1955 before shifting to television. Like many radio entertainers, his show was officially named after the sponsor, but the general public always called his shows THE BOB HOPE SHOW.

“Guest - Peter Lorre” aired on 1947-05-13. Bob Hope did his usual opening monologue for the North Hollywood studio audience, but they were a tough crowd and many of his gags fell flat. Next, a chanteuse sang a bland romantic ballad.

She was followed by comedienne Vera Vague, who was a star in her time but is now forgotten, then Jerry Colonna, who was Hope’s second banana and likewise forgotten. The three did a skit about house building in North Hollywood, which was undoubtedly forgotten by the listening audience about five minutes after it was performed.

A tenor sang a song about living in an adobe hacienda in Meh-hee-ko, which was bland in both English and Spanish. After a Pepsodent toothpaste commercial, Peter Lorre was finally introduced at the 19-minute mark.

Hope told Lorre “*I’ve always admired the way you commit a crime*”. He replied “*Thank you, Bob, and I’ve always admired your program*”. Hope complained about the way Lorre wanted to be paid, with a bundle of cash thrown over the cemetery wall at midnight.

Lorre said he was easy to get along with, to which Hope agreed, saying “*You either like someone or they’re not there anymore.*” From there they did a parody of INNER SANCTUM MYSTERIES.

Hope played a character driving along the road when he picked up a hitchhiker (Lorre), who was carrying two axes, a machine gun, a wire noose, and a bloodstained dagger. Listening to the car radio, they heard a police bulletin describing Lorre.

Lorre admitted he was the wanted murderer. He had been driven by anger at never winning a prize in radio quiz shows, not even a refrigerator. He sobbed at how unfair life was. They came to a roadblock manned by Colonna, who refused to give a Chevrolet to Lorre. Shots were fired, Hope expired, and so did the skit.

THE MARTIN AND LEWIS SHOW was the breakthrough radio show that took singer Dean Martin and comedian Jerry Lewis from Las Vegas headliners to national stardom. Being a variety-comedy series, there were no episode titles.

The series aired from 1949 to 1953 and was a variety show. Martin did the singing, along with a chanteuse, and acted as straight man to Lewis during comedy scenes. There was always a celebrity guest star to join in.

The show aired on 1948-05-08 had Peter Lorre as the guest star. Dean Martin crooned a song to open the episode. Then he and Jerry Lewis went to see their manager. He sent them off to a potential sponsor named Mr Price.

They asked Price what it was exactly his company manufactured. He said they used a secret formula and promptly told them it was $((X + 2)/\text{square root of pi}) + \text{CN}_3\text{HO}_4 \times 3.677 = Y$

“*What does that formula make?*”, asked Lewis. “*Orange marmalade*”, replied Price, “*made from 100% pure prunes*”. Getting down to the matter at hand, Price said his wife wanted him to sponsor a mystery series. No comedy or singing.

Walking back to the radio studio, Martin and Lewis noticed a theatre marquee advertising Peter Lorre. They went after him and found his apartment. His secretary answered the doorbell but was a firm gatekeeper and wouldn’t admit them.

She was about as nutty as Lewis but very taken with Martin. The latter romanced her into letting them talk to Lorre. He was actually pleased to see them, saying “*Two nice young ones*”, although he didn’t actually bwah-ha!-ha!.

Martin put in a plug for their show but Lorre was dubious. Martin said he admired Lorre’s acting, to which Lorre replied that he didn’t act, he really was that way. However they rehearsed a mystery where Lorre was on the lookout for an assistant with a weak mind to be hypnotized to commit murders for him.

Lorre put Lewis under and programmed him to rob a bank. Specifically he was to blow up the Chase National bank with some TNT. Lewis messed up. The next job was a diamond heist at a manor house, but Martin was waiting and arrested them.

That ended the mystery but Lorre told the boys what he really wanted was to be a cheerful disk jockey. They paused for Martin to sing another selection.

Back at the plot, Lewis and Lorre decided to call themselves The Sunshine Boys. They sang a duet for an intro, then did a commercial for Floop, the breakfast cereal that makes you wish it was lunchtime.

Next was the Problem Corner, with Dr Peter Lorre. The gags gave way to doggerel poetry, ridiculous commercials, and fake songs spun on the turntables. They finished with as a trio singing a song “Drop Dead”.

Martin and Lewis telephoned Price, only to learn he hadn’t listened to the show. There was a brief plug for Lorre’s forthcoming movie ROPE OF SAND, and then finis.

WILLIAM HENRY PRATT: PART 2

by Dale Speirs

[Part 1 appeared in OPUNTIA #516.]

Boris Karloff, as Pratt was better known, is remembered for his movies, but like numerous actors from the 1930s to the 1950s, he appeared in many radio shows. The episodes mentioned here are available from the Old Time Radio Researchers as free downloads from www.otrr.org/OTRRLibrary

Comedy Tonight.

The comedy series DUFFY’S TAVERN aired from 1941 to 1951. Set in Manhattan somewhere in the dingier part of Third Avenue, the tavern was a cheap joint where the liquor was watered, the service was lousy, and the free lunch inedible.

Archie (no surname ever given) was the manager. He frequently had one-sided telephone conversations with the owner Duffy, who was never seen or heard directly. Other characters were Eddie the waiter, Miss Duffy (daughter), and Finnegan the village idiot (if Manhattan can be said to be a village).

Each week there was a guest star, who was integrated into the plot as someone Archie was trying to persuade to take part in one of his plans.

“Duffy Wants To Sell The Tavern” was written by Larry Rhine and Budd Grossman, and aired on 1951-10-05. The plot was obvious from the title. The script was reused with changes from a similar 1947 episode. When Archie got the news he went into a tizzy. A sale would mean he had to go out and find a real job where he would be expected to work for a living.

Learning that a real estate agent was on the way, Archie telephoned Boris Karloff for help. The idea was that a haunted tavern would spike a sale. Miss Duffy was pleased that her favourite monster was coming to visit.

Archie suggested to the resident musician Fats Pichon that he play an appropriate tune on the piano when Karloff arrived. Say, for example, “A Pretty Ghoul Is Like A Malady”.

The great man arrived. After some cross-talk, Archie offered him a drink, saying: “*Name your poison*”. Replied Karloff, “*Please, let’s not talk shop. I’ll have a zombie.*” Miss Duffy sidled up and tried to romance Karloff by blurting “*Will you marry me?*”

After chasing her away, Archie explained that he needed something to scare away the real estate agent. Karloff suggested using the free lunch, but cheerfully agreed to go along with Archie’s plan. As Fats pointed out, the tavern was already staged, what with the gloomy lighting, moldy walls, rodents, and cobwebbed ceiling.

The agent arrived and introduced himself as Es Crow. He began asking questions, while Archie gave answers designed to discourage him, such as saying the roof was in good condition and only leaked when it rained.

Archie mentioned the haunting, Karloff’s cue to enter and try to scare him. Crow was made of sterner stuff and wasn’t frightened. Until Finnegan arrived and scared him away.

THE MARTIN AND LEWIS SHOW was visited by Boris Karloff on 1952-04-18. After Dean Martin’s opening ballad, there was an exchange of gags with Lewis, a skit about cooking, the first commercial, another ballad, and a second commercial.

Finally, at the 13-minute mark, Boris Karloff was introduced as a kind and cultured man. He thanked Martin for the wonderful introduction. There was silence, and Karloff asked Martin why he didn't say anything. Martin wheezed a gasping answer: "*I can't, you're choking me.*" Karloff apologized, saying it was force of habit.

He then turned his attention to Jerry Lewis, who admitted being frightened because in the movies Karloff always looked like a monster. Karloff explained that the makeup made him look like a monster. Without missing a beat, he then asked Lewis: "*What's your excuse?*" That got a big laugh from the audience.

After some cross-talk, Karloff said he admired Lewis in his movies, which segued into a skit "Just Plain Dracula". Modern listeners may miss the joke, as from 1932 to 1955 there was a popular radio soap opera called JUST PLAIN BILL. The joke was funnier back then.

The setting was a family of werewolves, with Karloff as the father and the other two men as his sons. He told Martin that his mother had just brought in some fresh meat. "*Anybody I know?*", asked Martin. Lewis was ashamed of being a werewolf, so Karloff and Martin tried to bolster him. Lots of cross talk, then a parody song to finish the skit.

Deadly Serious.

THE ROYAL GELATIN HOUR was one of the many sponsorship names for what listeners referred to as THE RUDY VALLEE SHOW. This variety show aired an episode on 1938-05-05 with Boris Karloff as the headliner guest.

What with all the musical numbers and assorted variety acts, Karloff didn't walk on stage until the 42m40s mark, when the episode was almost over. He performed a serious playlet "Danse Macabre", written by Arch Oboler of LIGHTS OUT fame, based on the tone poem by Camille Saint-Saëns.

Karloff was the Devil, soft-spoken as he chatted with the narrator, who had strayed into the cemetery at the wrong time. The Devil offered him surcease, a pistol to help the man join his dead son whom he mourned greatly.

Singing rose up from the ground from the graves. The Devil began playing a violin. The graves opened and skeletons crawled out of the graves to dance. The Devil shouted at the man to join the dance, but failed.

Pastiches.

THE ZERO HOUR was an unsuccessful attempt to revive radio drama that aired 1973-74. Available as free downloads from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

"Murder Is A Work Of Art" aired on 1974-07-02 and was written by Glenhall Taylor. A dead man showed up in the mummy room of a museum, stabbed by a stiletto.

He was Bruno Karnes, an actor known for horror movies and who was now starring in his final role during a Homicide investigation. The listener will know who was meant, even though Karnes never got a speaking part.

Grace Phillips notified the night watchman Abbington by screaming her head off. She told Abbington she was a researcher staying late at night but later admitted to police she was an actress hired to perform at the museum.

Her job was to wait in a corridor and then scream. She never went into the mummy room and didn't know the body was there. Grace had done a bit part in a Karnes movie. She told the police detective that everyone liked Karnes, to which he replied that at least one person did not.

The publicity man for a movie studio said this was to have been a stunt for Karnes' latest horror film. No prizes for guessing what the movie was about. There were alarums aplenty down in the museum basement. Assorted characters were kidnapped, murdered, or slugged unconscious.

A trap was laid for the murderer and sprung on Abbington. He confessed all, that as a young man Karnes' father had ruined his acting career. The father being dead, he took it out on the son.

MR AND MRS DETECTIVE: PART 3

by Dale Speirs

[Parts 1 to 2 appeared in OPUNTIAAs #527 and 544.]

From the 1930s to the 1960s, there was a fad in mystery fiction for husband and wife sleuths. Various movies and radio series were based on novels of couples such as Mr and Mrs North, Nick and Nora Charles (aka the Thin Man), and Pat and Jean Abbott. The concept survived into the 1970s with the television show MCMILLAN AND WIFE.

Some couples were strictly amateurs, such as the Norths, while others had the husband as a police officer or private detective with the wife tagging along. The radio series are available as free mp3s from www.otrr.org/OTRRLibrary.

The Norths.

MR AND MRS NORTH aired on radio from 1942 to 1955, based on the novels by Frances and Richard Lockridge. The protagonists were Jerry and Pam North, average citizens who could afford a Manhattan penthouse. They had a remarkable propensity for stumbling into murder cases.

Jerry was a publisher and Pam was a housewife. Lt Bill Weigand, NYPD Homicide, kept tripping across them during his investigations. He was a single man, so Pam was constantly trying matchmaking with him.

DEATH ON THE AISLE by the Lockridges was a novel originally published in 1942 and republished in 2019 by Otto Penzler, which was the version I read. This was one of 27 novels about the Norths.

In the opening pages of this novel, the plot began with this sentence: *There was a man dead in a seat in the West 45th Street Theatre, which was against regulations.* Lieutenant William Weigand was assigned the case but the Norths were already there.

Dr Carney Bolton had been stabbed through the back of his neck as he sat watching the stage. The play was indeed the thing to stir up the producer, playwright, actors, and assorted crew. Bolton had been the financial backer of the play.

The death toll increased as the Norths and NYPD investigated. Pam got a serious bang on the head but since she was booked for the series she survived.

The final chapter was an extended, very extended, explanation of who did what to whom and where in the theatre they were at any given moment. I was surprised nobody used a stopwatch and clipboard. The killer was seeking revenge for a surgical operation Bolton did on her that ruined her looks, or so she thought.

The Charles.

THE THIN MAN was a 1933 novel by Dashiell Hammett. The protagonists were Nick and Nora Charles, wealthy amateur sleuths. They became a radio series from 1941 to 1950.

THE ADVENTURES OF THE THIN MAN were often transcribed for the American armed forces radio services under different show titles. These transcriptions were disks circulated around overseas camps and ships, so they had a better chance of being converted to mp3s in the modern era than poorer-quality air checks.

Hammett was named as a Communist sympathizer during the Red Scare and forced off the air in the early 1950s, which took down the radio series. By the late 1950s, the witch hunters had left the field and a television series aired for two seasons from 1957 to 1959.

“The Strange Case Of Professor Wainger” aired in 1942. The mp3 at hand was from THE FRONT LINE THEATER, which aired transcribed disks of popular shows to troops overseas.

This was a Thin Man episode but not named as such. The commercials were edited out of such transcriptions and the credits often cut. To keep the time length the same, orchestral music was substituted.

Erwin Harris was visiting Nick and Nora Charles. He had been hired by Professor Wainger as a chauffeur but since the man never left the house, he had nothing to do. As they chatted a deliveryman brought a funeral wreath. Since no one had died yet, the Charles refused the delivery. After he left, a threatening telephone call was received.

A young couple arrived, Sylvia Wainger and her brother Gene. The professor was their uncle but they couldn't get through to him. He was a refugee from Czechoslovakia and feared the Gestapo was after him.

The Charles took the Waingers to their uncle's house, and persuaded Harris to get them admitted inside. The professor said he had never heard of Sylvia and Gene. The Charles talked the professor into accepting them into house.

Harris didn't trust the young couple. The professor was doing war work and was about to demonstrate his superscience submarine detector. The lights went out, and when they came back on, Harris was murdered.

The police thought the professor was the target. Gene vanished and when Sylvia was interrogated, she admitted they were husband and wife, not brother and sister. The police had their suspect and the Charles had their's, the florist who sent the wreath.

Gene showed up at the Charles apartment, to be greeted by the police. The twist was that the professor was the imposter, not Sylvia and Gene.

"The Case Of The Wandering Corpse" aired on 1943-10-10. The mp3 was from TAOTTM, not an Armed Forces transcription. Twas the Charles' wedding anniversary and Nora thought husband Nick had forgotten about it.

Flowers were delivered but they were for a funeral. Separately, the Charles' friend Eb arrived. Nick was perturbed because he had ordered a different bouquet with a necklace he bought from a jeweler to be included.

Nora wouldn't listen and believed Nick had forgotten and concocted a story. She carried on like a ninny, making any male listener to this episode glad he wasn't married to her.

The Charles and Eb went to the florist to straighten out the matter. The wreath should have gone to showgirl Gwen Gilroy, whom Nick had dated before marrying Nora.

They went to see Gwen, just widowed as in a day or two ago. She had married a millionaire named Virgil Gilroy, back when a million was real money. Trouble was, the body went missing from the coffin.

The action abruptly paused for a commercial extolling the benefits of a breakfast cereal. Post Toasties was cheerfully recommended for its nutritional and energy-giving value. Guaranteed to pep you up.

They found a body behind the couch but not of the dearly departed. No sign of the necklace either. Possibly Virgil had been eating Post Toasties. Nick found a clue in the unknown corpse's body that directed them to a hotel.

Off the Charles went, carrying the corpse over Nick's shoulder. Wrapped in a blanket, of course, so as not to cause undue alarm in passersby. The hotel desk clerk identified the corpse as a guest Joe Jones, or more correctly, now a former guest.

Nick was more concerned about the necklace than the two corpses. Nora dressed as a Swedish maid to infiltrate the house of a suspect. He was Barton Bellows, boyfriend of Gwen.

The plot became more ridiculous. The Charles hadn't yet informed police, but then again they seldom did. Gwen also didn't want to bother the police and worked on Ev to keep him quiet. Bellows arrived to complicate the conversation.

Fortunately Nick arrived to explain everything. Virgil had been poisoned by Bellows. Gwen pulled a gun, Bellows grabbed it and turned it on her, then Nick intervened.

Nick having apparently run out of breath, Ebenezer took over the explaining. The good news was that Nick recovered the necklace. Nothing for it but to have some more Post Toasties.

The Abbotts.

Pat and Jean Abbott were latecomers to the married sleuths subgenre, based on the novels by Frances Crane. On radio, ABBOTT MYSTERIES aired from 1945 to 1947. The series was revived for the 1954-55 season as THE ADVENTURES OF THE ABBOTTS.

The radio episodes were written by Howard Merrill. Available as free downloads from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

The Abbotts lived in San Francisco. Jean usually narrated the segues, while Pat, a private detective, did the action scenes. She was a jealous wife. They bickered anytime he went near a good-looking woman. Her main function was to have things explained to her and frequently be kidnapped.

“The Canary Yellow Sack” aired on 1955-03-20. The episode opened with Jean Abbott puzzled by a classified ad that offered antique chromo prints at a different price with each insertion. That puzzle was dropped momentarily when a client walked into Pat's office.

Mrs Tom Stewart's husband was missing. The problem began when she answered an advertisement for chromos. Nothing happened after she mailed a cheque, so she sent Tom to investigate the address. He never came back. As they were talking, someone in the hallway fired shots into the office, killing her.

After calling the police, Pat surmised the ads were in some type of code. Rummaging through the dead woman's purse, they found assorted clippings of the ad in variations, plus a plane ticket to Seattle for the next morning.

Jean left the office and was kidnapped on the street. The kidnapper telephoned Pat and told him, in a Noo Yawk gangster voice, to lay off investigating the ads. Oh, and don't tell the police. Pat's first line of investigation was the newspaper office but they wouldn't divulge the address of the advertiser.

The gangster phoned back and said he knew about the visit to the newspaper office. Notwithstanding the threat, Pat ran back to the newspaper office. The classifieds clerk had just suddenly died mysteriously, possibly a heart attack. Pat went to another newspaper and placed an ad, a duplicate of one of the chromo classifieds.

He figured the ads were codes for secret rendezvouses, so he set one up. A truck showed up and Pat sneaked on board. No one being there, the driver went off to a warehouse. The cargo was barrels full of gelatin capsules and, separately, white powder.

Pat found Jean inside the warehouse. There were the usual alarums. What the gangsters were selling were non-narcotic sleeping pills, which apparently weren't illegal under federal law. A gangster helpfully explained that Mrs Stewart, not her real name and not married, had been a member of the gang.

She got in a tiff with them. Rather than confront them directly, she decided to have them exposed by a private detective before skipping town to Seattle. She didn't know they were tailing her and the rest you know.

The police arrived at the warehouse in the nick of time. Not revealed until then was that while riding in the back of the truck, Pat had cut open the sacks one by one, then dribbled a trail of pills and powder behind the truck.

He figured correctly that a passing police car would notice and follow the trail. After a lecture on the local drug trade, the episode concluded with a fanfare from the orchestra.

“The Clue Of The Ivory Thread” aired on 1955-03-27. The opening music of this episode struck me as familiar, then I remembered it as the intro to the Nero Wolfe series starring Sydney Greenstreet.

Jean was miffed because Pat wasn't particularly moved by her new and very expensive perfume, Essence of Gardinia. \$40 per half ounce, or about \$400 for 15 millilitres in today's currency.

“*Call me John Smith*”, said the client and handed Pat an envelope containing \$10,000 in cash. He wanted to find Eloisa Hernandez. Her body was in a local cemetery. Pat handed back the envelope and sent him on his way.

Hardly had the man departed when a psychiatrist named Dr Frederick Hays arrived looking for him. Mr Smith was Phillip Clark, a paranoid. The doctor then departed, having left an infodump about Clark, including his address.

The Abbotts went out that night, not to a movie but to Clark's house in a neighbourhood perched on a cliff on the opposite side of San Francisco Bay. The weather was stormy and wet. They rang the doorbell. No one answered so they entered the house.

Clark was standing at the top of the stairs with a knife in his back. The murderer just starting to flee as Clark was just starting to die. The killer got away across the rooftops. Pretty good considering the heavy rain. The culprit dropped a fancy dress with a pattern on it.

The Abbotts took it home to study the patterns. The police might have wanted the dress for evidence but then again they weren't notified of the murder by the

Abbotts. The dress had a building plan hidden in the embroidery using ivory threads.

Pat figured the killer would come looking for the dress. The man didn't show but the next day Dr Hays did. He had read about Clark's death in the newspaper, so a neighbour must have phoned it in. Hays admitted he was not a psychiatrist although he said his name was genuine.

He said Jean had been kidnapped in exchange for the dress. Hays explained the map on the dress gave the location of Spanish gold treasure in an old mission. Hernandez had been buried in the dress. Clark dug up the grave and the killer sent him into one. Hays had hired the man and was most annoyed that the fool had dropped the dress.

Pat went to get the dress but it was gone. Hays was a reasonable man and gave him until midnight to find it. Eventually they learned Jean was wearing the dress under loose clothing.

The mission was a noisy place that night, what with all the treasure searching, gunshots, and Hays being shot down from the belfry. The bells! The bells! Okay, he didn't actually say that but the sound effects man clearly loved ringing them. After the alarms were over and the treasure located, Pat and Jean reconciled over the perfume. Until she told him she bought four more bottles.

The Collins.

IT'S A CRIME, MR COLLINS was an old-time radio series on the Mutual network, copying the Abbotts on the NBC network. San Francisco private investigator Greg Collins was assisted by his wife Gail. The series was a blatant imitation of the Abbotts, with enough name changes to avoid a plagiarism lawsuit.

The series only ran for a half-season from August 1956 until February 1957, but the surviving mp3s are from an Australian syndication. Old-time radio was on its last legs by then, with little original programming left.

"Lost Film" aired in 1956. Gail and Greg Collins, normally resident in San Francisco, were on vacation in New York City. She witnessed a fatal traffic accident where a man bumped into her, stumbled into the street, and was run over by a truck.

Strange incidents followed. Someone was tagging her, the same man constantly tailing her. Greg was blasé about the matter, telling her not to worry her pretty little head. He took the matter more seriously when Gail was kidnapped.

The kidnapper demanded his property back, which he insisted Gail had taken. He departed with threats and a moment later another goon arrived. He wanted the package and said he knew all about Greg being in collusion with the kidnapper, whom he identified as Reagan.

The second goon said he was FBI. The dead man was a fellow agent who had been carrying evidence that would convict Reagan of fraud. Greg figured that the drop had been into Gail's overcoat pocket. He searched it and found a roll of microfilm.

Greg went to meet Reagan. The FBI arrived in the nick of time, a shot was fired, and the case was wrapped up. Greg quickly explained away a few loose threads to Gail in the epilogue and all was well.

"The Bowl of Temple Fire Red" aired on 1957-03-11, no writer credited. Julie Meyers and her boyfriend Phillip Cairns had just arrived in San Francisco when he was murdered. He had been bringing the Ming Woo Fang Bowl but left it in Miles' trunk, carrying a decoy box with himself.

The killer got away with an empty box. Julie took the bowl to an antiques dealer named Shore, who then called Greg Collins for a consultation. The police were bumbling about somewhere. The dealer said the bowl was a fake.

Greg began tailing Julie and collecting plot coupons. She wasn't sentimental about Phillip (her words). Greg got cosy with her in a restaurant but Gail arrived at an inopportune moment. So did Benny, who was a boyfriend of Julie and no more happy to see Greg than Gail.

Shore arrived and threatened the Collins with a hidden handgun. Greg accused him of the murder and preparing a fake bowl to swap for the real one. Shore bragged that he dunnit. He didn't get away with the crime because the Collins were booked for the series and he wasn't.

THE PLAY'S THE THING: PART 1. THE SCOTTISH PLAY

by Dale Speirs

Some fiction about those who strut and fret their hour upon the stage.

Shakespeare Senu Lato.

THE GRUB STREET NIGHTS ENTERTAINMENTS (1924) by J.C. Squire was a collection of nine of his stories of the literary life. One story was "The Golden Scilens". Mackenzie Wile was a nebbish Londoner who scraped out a modest living arbitrating books, that is, buying low from one dealer and selling high to another. His knowledge of books enabled him to spot what others missed.

And so to an auction of manuscripts, a junk lot of which included a Jacobean ledger book of household accounts. Wile recognized the account book was in the handwriting of Anne Hathaway.

More importantly, he recognized that the book was bound with scrap pages in her husband's handwriting. The vital clue on the scraps were the final lines from an early draft of HAMLET, ending with "*The rest is scilens*". Shakespeare was the only person known to spell the word 'silence' as 'scilens'.

Bringing Home The Bacon.

Sherlock Holmes was very successful on radio. He aired on several networks with several sets of actors from 1930 to 1956, encompassing the entire lifespan of old-time radio. Available as free downloads from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

"The Adventure Of The Malicious Moor" was written by Max Ehrlich and aired on 1949-01-03. Roger Mannering was rehearsing in Stratford-upon-Avon with his wife Alice. He was Othello the moor and she was Desdemona. Hugh Graham was an ambitious understudy who wanted the part of Othello.

The couple were in the midst of a nasty divorce and squabbled constantly through rehearsals. In a private session, Othello strangled Desdemona. But was it Hugh or Roger? Blackface was legal in those days, and a good disguise if the two men were about the same build.

Holmes and Watson were called in. Searching backstage, they found Roger's body in a steamer trunk. The hue and cry eventually found Hugh in Birmingham and he was brought back. The obvious suspect was ignored by Holmes. He went after Rand the caretaker, who had a collection of books about Sir Francis Bacon in his office.

Many claim Bacon wrote the plays. Isaac Asimov wrote a refutation in 1971 ("Bill And I") based on scientific errors in the plays that Bacon never would have made since he had scientific training that Shakespeare did not.

Came opening night for the play, and both Rand and the books were missing. Holmes and Watson ambushed Rand who was trying to blow up the theatre. Rand was revealed to be John Bacon, a direct descendant of Sir Francis.

Rand had first killed Roger and then impersonated him when murdering Alice. He went to the gallows shouting that the play's the thing of Bacon.

Cozy Shakespeare.

Elizabeth J. Duncan wrote a cozy series about Charlotte Fairfax of the Catskills Shakespeare Theater Company in New York State. Charlotte was the wardrobe mistress and resident Miss Marple.

The company was located at a grand old hotel in the Catskills during the era of decline. The family that owned one of the few remaining hotels established an annual Shakespeare festival to draw guests and was struggling along on the financial edge.

UNTIMELY DEATH (2015) was the first novel in the series. The theatre company was staging "Romeo And Juliet". The play became too true to life when the leading lady Lauren Richmond was poisoned and then stabbed to death. She was a diva, so there were plenty of people who had motive.

As per standard practice, the leading man Brian Prentice was a downhill-slope actor hired for name value rather than acting. He had married into nobility, and his wife Lady Deborah was only a few steps behind him in her career path.

Charlotte began sleuthing and dug up some toxic events from the pasts of the major suspects. Lauren had made the mistake of tangling with her Ladyship over faked heirloom jewelry.

The play went on without either of them. *For never was a story of more woe than this of Juliet and her Romeo.*

ILL MET BY MURDER (2016) was the second novel in the series. Wealthy matron Paula Van Dusen was hosting the company at a benefit performance on her estate. Following after the play was her daughter Belinda's wedding to Adrian Archer. The play was "A Midsummer Night's Dream".

The after-party featured the murder of Hugh Hedley. He had been Adrian's rival for the hand of Belinda, and also in business, as both dealt in Manhattan real estate. The victim was found wearing a donkey's head mask from the play, murdered by moonlight.

Paula wanted the whole thing hushed up. Charlotte Fairfax was thus drawn into the tangle. The final confrontation and lengthy exposition was about who did what to whom and when. Inheritance, illicit romance, sharp business practice, the usual things. The final sentence was "*Lord, what fools these mortals be!*" Apparently a quote.

MUCH ADO ABOUT MURDER (2017) was the third novel in the series. Charlotte Fairfax was caught in the middle of backstage politics. The leading lady got the director fired and replaced with a newcomer Edmund Albright. He managed to antagonize most of the company so his murder wasn't a complete surprise.

The play was "Much Ado About Nothing", rather inappropriate in this setting. However the opening night performance went well. There was a second murder from the past which sent the police haring off after the wrong rabbit.

The killer turned out to be the obvious suspect. He tried to eliminate Charlotte, forgetting that the star of a series always survives to the next novel.

BAKE, BORROW, AND STEAL (2022) by Ellie Alexander (pseudonym of Katherine Dyer-Seeley) was a novel in a food cozy series, but I'll put it here for its Shakespearean emphasis.

The protagonist was Juliet Capshaw of Ashland, Oregon. Her family operated the Torte bakery and she Marpled on the side. The local university museum was staging a grand fete for a new exhibit. The Torte bakery was catering the opening gala with cakes, tarts, and jellies.

The exhibit was of a manuscript "Double Falsehood", supposedly by Shakespeare. (A disputed attribution in real life.) The manuscript went missing at the gala, and the body of a security guard was found.

Juliet being the resident Miss Marple, expected to solve the crime but was constantly tripped up by several other amateur sleuths who didn't know their place. The police? What of them?

The good news was that the desserts were a smash hit. Since the police wouldn't let the guests leave, they had nothing else to do but eat. "*So much so that the buffet table looked as if it had been hit by a swarm of locusts.*"

The snooping began, a competition between all the self-appointed amateurs. A box full of banknotes was found, good for stirring up speculation. Juliet had the honour of being held at gunpoint in the denouement. Disappointingly, these were undercover police waiting for the real culprit.

After they determined Juliet wasn't the one they wanted, the real thief walked into the room and events wrapped up. The manuscript, which many thought was a forgery, was to have been sold to the underground collectors market. From there to the recipes appendix.

Macbeth From Canada.

Randy McCharles is a Calgary novelist about whom outlanders should hear of more often. I buy his books at Calgary's readercon When Words Collide but presume they are available from Amazon or the usual online suspects.

MUCH ADO ABOUT MACBETH (2015) by Randy McCharles was a humorous novel about high school teacher Paul Samson, who decided to stage The Scottish Play. There followed trouble and strife on and off the proscenium.

The three weird sisters were in town, summoned to the high school, or rather, meeting at a Dairy Queen across the street. They made plans to curse the play. Hecate also came and went with her own nefarious deeds.

Meanwhile, back at the school, Samson had to fend off the local PTA, led by battleaxe Mrs Elizabeth Cadwell. They were opposed to a play about witchcraft, and preferred something romantic like ROMEO AND JULIET. Samson pointed out that play was about teen sex and suicide, which nonplused the group.

Then came the auditions. Samson's daughter Susie, having been kicked out of PhysEd for fighting during a soccer game, landed in his drama class. She won the part of Lady Macbeth. The witches interfered with the casting of King Macbeth, then began meddling in the affairs of the drama.

Various alarums transpired. A real ghost appeared, visible only to Samson. Not Banquo, fortunately, but an actress Scarlet Walker who had died on the high school stage decades before. Simon Riordan, the drama teacher who preceded Samson, made an appearance, out on a day pass from the institution where he was confined.

Cadwell kept up pressure but was constantly stymied. Notwithstanding the troubles, the play progressed. The students gradually learned their lines, cues, and movements. The sets were painted and props accumulated on a high school budget.

Eventually Samson began to catch on about the weird sisters being real. They were hexing the play because Hecate ruled over them. The sisters got word about this via Banquo, the real ghost this time, and began rebelling against Hecate.

Hecate won in the end, and the Macbeth play was replaced by a mashup with another play. A disappointing ending, as the story set up Samson to be a fighter winning against all odds, only to cave in during the last chapter with a weak compromise. The novel read well until the denouement.

A CONNECTICUT GUMSHOE IN THE CAVERN OF THE WEIRD SISTERS (2022) by Randy McCharles was a novel in a series about Sam Sparrow of East Hartford, Connecticut. He was a private investigator who idolized Sam Spade.

Sparrow had a problem of being magicked away to British places of yore by Morgan Le Fay to solve problems. Her problems, not his. She wanted him to make Thane Macbeth (as he then was) a success so that he would become king.

Macbeth couldn't do it without money to pay his army. Scotland was a poor country. Lady Macbeth was as ambitious as Shakespeare wrote her centuries later.

Le Fay heard about an American invention called nightclubs, which apparently made sizeable profits. Therefore she ordered Sparrow to establish and operate a nightclub, despite his protestations that he knew nothing about the job. She gave him one bit of help, a ring that made him invisible when he wore it on his finger.

Sparrow found himself traveling with Macbeth, Banquo, et al, as Scotland dealt with the Norse invasion and awaited King Duncan's passing. Sparrow was accompanied by three weird sisters, not appearing as hags as they did for Macbeth but as beautiful waitresses for Sparrow's nightclub.

Setting up the nightclub, named Casablanca, in a medieval land was not easy. Liquor was expensive and hard to obtain, a harpist had to substitute for a jazz band, there was no food refrigeration in summer, and supplies were scarce. Casablanca would make its money as a casino. The house always gets a cut in Las Vegas, and Macbeth's castle in Inverness would get the same, about 10%.

King Duncan himself attended the grand opening, and all hailed Macbeth, including his enemies, thanes who knew how to behave politely even if they didn't like him.

That night the deed was done, and Macbeth murdered Duncan. Sparrow had the inside track as Macduff and other thanes gathered in the nightclub to discuss what was to be done and who should be the next king.

From there, the thanes and their entourages departed for Scone to see Macbeth crowned as king. The plot then took a clever turn into the movie CASABLANCA, only with medieval Scots instead of Vichy French.

There was, however, a Major Strasser, head of Inverness security, who gave Sparrow difficulties while looking for some papers. Other characters from the cast list of the movie appeared. Strangely the two plots mashed together nicely.

Using his ring of invisibility, Sparrow was able to suss out some goings-on, though not to much practical use until Banquo was murdered. At that point, the reader will easily guess who played Banquo's ghost at the banquet celebrating King Macbeth's accession to the throne of Scotland.

Events followed as per Shakespeare's play, which was mostly fictionalized and not an accurate historical account of the real Macbeth. The ending was a twist

on the play. The prophecy that no man born of a woman could kill Macbeth was fulfilled not the way Shakespeare wrote but a simpler and much more logical method.

The Macbeth Curse.

I've never believed in the actors' superstition about a supposed curse set on Shakespeare's play MACBETH. Yes, I'm sure there have been accidents and bizarre happenings when the play was performed but anecdotal evidence proves nothing. There have been lots of other plays which had incidents but no one made a big deal about them.

Which brings me to THE SCOTTISH PLAY MURDER (2013) by Anne Rutherford (pseudonym of Julianne Lee). This was a mystery novel set in Restoration England. Actress Suzanne Thornton was struggling to survive in an era when livestock had more rights than women.

She operated an actors' company staging MACBETH. The leading man Diarmid Ramsey was suspected in two murders, but the show must go on. Some thought the deaths were part of a plot against the new king, who wasn't yet too secure upon the throne. Uneasy lies the head, etcetera.

Police investigations ran to thumbscrews. Suzanne had to watch herself all the time since single women were fair game. The culprit was identified. Lady Macbeth wasn't the only one who had trouble washing the blood from her hands. Out, damn spot!

IT IS WRITTEN, HE SPOKE

by Dale Speirs

THE LETTER H: PAST, PRESENT, AND FUTURE (1880) by Alfred Leach was from www.gutenberg.org as a free download.

He noted that "*As the chemist employs a compound of sulphur in order to decide by the reaction whether a substance belongs to the group of higher or of baser metals, so does society apply the H-test to unknown individuals, and group them according to their comportment under the ordeal. There can be no doubt that a tendency of the age is to over-rate the value of H as a critical test for refinement and culture.*"

140 years later, not much has changed. Those who can't pronounce an initial H in a word are relegated as Cockneys. In North America, the same principle applied to the initial T. Someone who says dem and dey instead of them and they is probably a lowlife.

However, H dropping is no new thing. Leach noted: "*In Latin also the H was at first harsh; but later on indications occur of the decline and fall of the Roman H in the fact of Quintilian complaining of the H-dropping propensities of his contemporaries. ... The Romans are thus responsible for ancient (if not venerable) precedents in eclectic H-dropping.*"

In the English language, pronunciation changes are common that dropped the voiced H but kept the H in the written form, even among the intelligentsia and the landed gentry. If you say 'ere instead of here, then you are identified as lower-class. Yet North Americans of all classes speak the words 'hour' or 'honest' without the H.

Leach noted there is no logic or pattern in dropping or adding an H over the development of spoken European languages.

"There is something startling in the announcement that were William Shakespeare to hear one of his plays read by a good speaker of our own day, it would be less intelligible to him than if spoken in the Somersetshire dialect. So great is the change in English pronunciation."

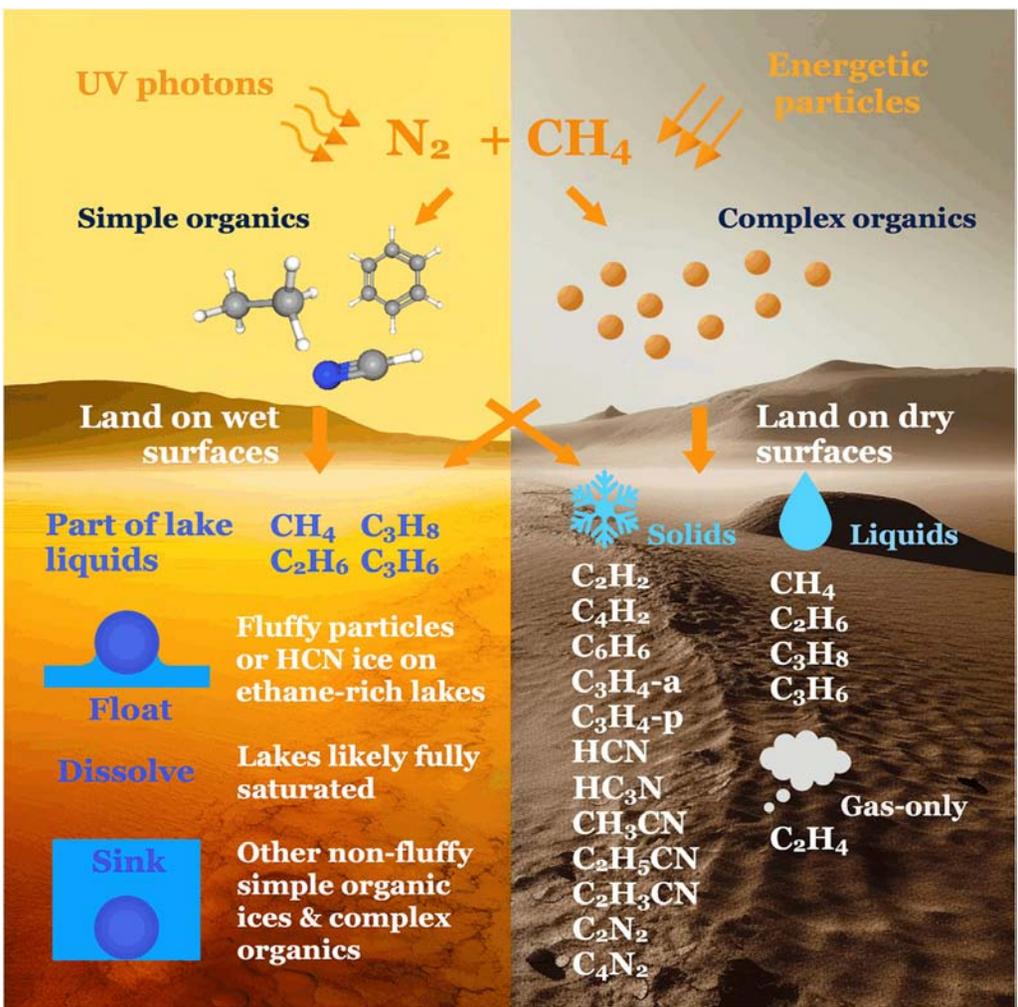
SEEN IN THE LITERATURE

Satellites.

Yu, X., et al (2024) **The fate of simple organics on Titan's surface: A theoretical perspective.** GEOPHYSICAL RESEARCH LETTERS 51:doi.org/10.1029/2023GL106156

Authors' abstract: *Atmospheric photochemistry on Titan continuously transforms methane and nitrogen gases into various organic compounds. This study explores the fate of these molecules when they land on Titan's surface.*

Our analytical exploration reveals that most simple organics found in Titan's atmosphere, including all nitriles, triple-bonded hydrocarbons, and benzene,



land as solids. Only a few compounds are in the liquid phase, while only ethylene remains gaseous.

For the simple organics that land as solids, we further examine their interactions with Titan's lake liquids. Utilizing principles of buoyancy, we found that flotation can be achieved via porosity-induced (25% to 60% porosity) or capillary force-induced buoyancy for hydrogen cyanide ices on ethane-rich lakes.

Otherwise, these ices would sink and become lakebed sediments. By evaluating the timescale of flotation, our findings suggest that porosity-induced flotation of millimeter-sized and larger sediments is the only plausible mechanism for floating solids to explain the transient “magic islands” phenomena on Titan's lakes.

[Images are from this paper.]

Planets.

Rodriguez, J.A.P., et al (2023) **Mercury's hidden past: Revealing a volatile-dominated layer through glacier-like features and chaotic terrains.** PLANETARY SCIENCE JOURNAL 4:doi.org/10.3847/PSJ/acf219 (available as a free pdf)

[Halite is rock salt. This study proposes there were glaciers of halite on Mercury.]

Authors' abstract: *The discovery of global elemental volatile compositions, sublimation hollows, and chaotic terrains has significantly reshaped our understanding of Mercury's geology.*

These findings suggest the existence of volatile-rich layers (VRLs) extending several kilometers in depth, challenging the traditionally held view of a predominantly volatile-devoid Mercury crust. However, the precise nature and origin of these VRLs remain to be elucidated.

The Raditladi basin exhibits morphologies analogous to terrestrial and Martian glaciers. These geomorphological features are potentially derived from impact-exposed VRLs, likely constituted of halite, other semivolatile salts, or

organic volatiles. The distinctive rheological traits of substances such as halite substantiate this hypothesis. The inference posits a potential ubiquity of VRLs on a planetary scale, albeit potentially ensconced at considerable depth in specific regions.

North polar chaotic terrains elucidate the VRLs' genesis and temporal evolution. The intense fragmentation of heavily cratered landscapes during their formation indicates a composition dominated by volatiles.

This finding postulates a phase of volatile-enriched crustal accretion predating the Late Heavy Bombardment (~3.9 gigayears ago). Regardless of lost mass, the unaltered basal elevation post-collapse signals a transition to a volatile-free stratum.

The exposure of an exhumed lithological substrate within Mercury's stratigraphy, identifiable in gravimetry as an impacted paleosurface, contests the magma ocean differentiation concept for VRL formation. It infers a grand-scale construct originating from depositional processes, possibly due to the collapse of a transient, hot primordial atmosphere.

Origin Of Life.

Demoulin, C.F., et al (2024) **Oldest thylakoids in fossil cells directly evidence oxygenic photosynthesis.** NATURE 625:doi.org/10.1038/s41586-023-06896-7

Authors' abstract: *Today oxygenic photosynthesis is unique to cyanobacteria and their plastid relatives within eukaryotes. Although its origin before the Great Oxidation Event is still debated, the accumulation of O₂ profoundly modified the redox chemistry of the Earth and the evolution of the biosphere, including complex life.*

Understanding the diversification of cyanobacteria is thus crucial to grasping the coevolution of our planet and life, but their early fossil record remains ambiguous. Extant cyanobacteria include the thylakoid-less Gloeobacter-like group and the remainder of cyanobacteria that acquired thylakoid membranes.

The timing of this divergence is indirectly estimated at between 2.7 and 2.0 billion years ago (Ga) based on molecular clocks and phylogenies and inferred

from the earliest undisputed fossil record of Eoentophysalis belcherensis, a 2.018 to 1.854 Ga pleurocapsalean cyanobacterium preserved in silicified stromatolites.

Here we report the oldest direct evidence of thylakoid membranes in a parallel-to-contorted arrangement within the enigmatic cylindrical microfossils Navifusa majensis from the McDermott Formation, Tawallah Group, Australia (1.78 to 1.73 Ga), and in a parietal arrangement in specimens from the Grassy Bay Formation, Shaler Supergroup, Canada (1.01 to 0.9 Ga).

This discovery extends their fossil record by at least 1.2 Ga and provides a minimum age for the divergence of thylakoid-bearing cyanobacteria at roughly 1.75 Ga.

It allows the unambiguous identification of early oxygenic photosynthesizers and a new redox proxy for probing early Earth ecosystems, highlighting the importance of examining the ultrastructure of fossil cells to decipher their palaeobiology and early evolution.

Paleobiology.

Park, T.Y.S., et al (2023) **A giant stem-group chaetognath.** SCIENCE ADVANCES 10:doi.org/10.1126/sciadv.adi6678 (available as a free pdf)

Authors' abstract: *Chaetognaths, with their characteristic grasping spines, are the oldest known pelagic predators, found in the lowest Cambrian (Terreneuvian).*

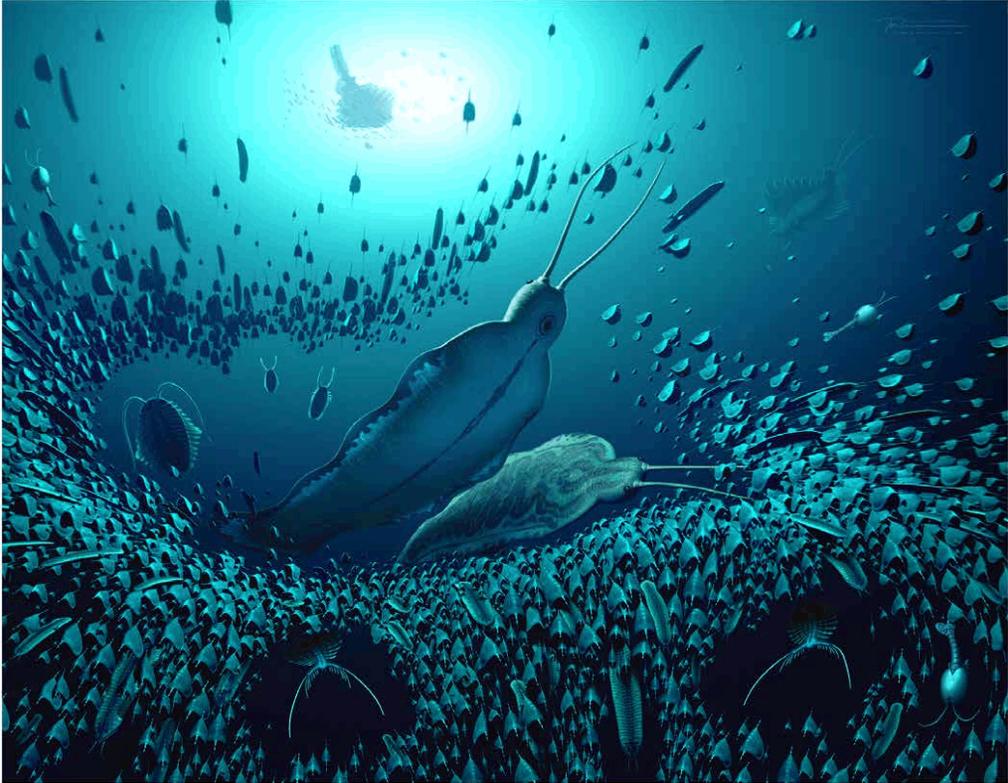
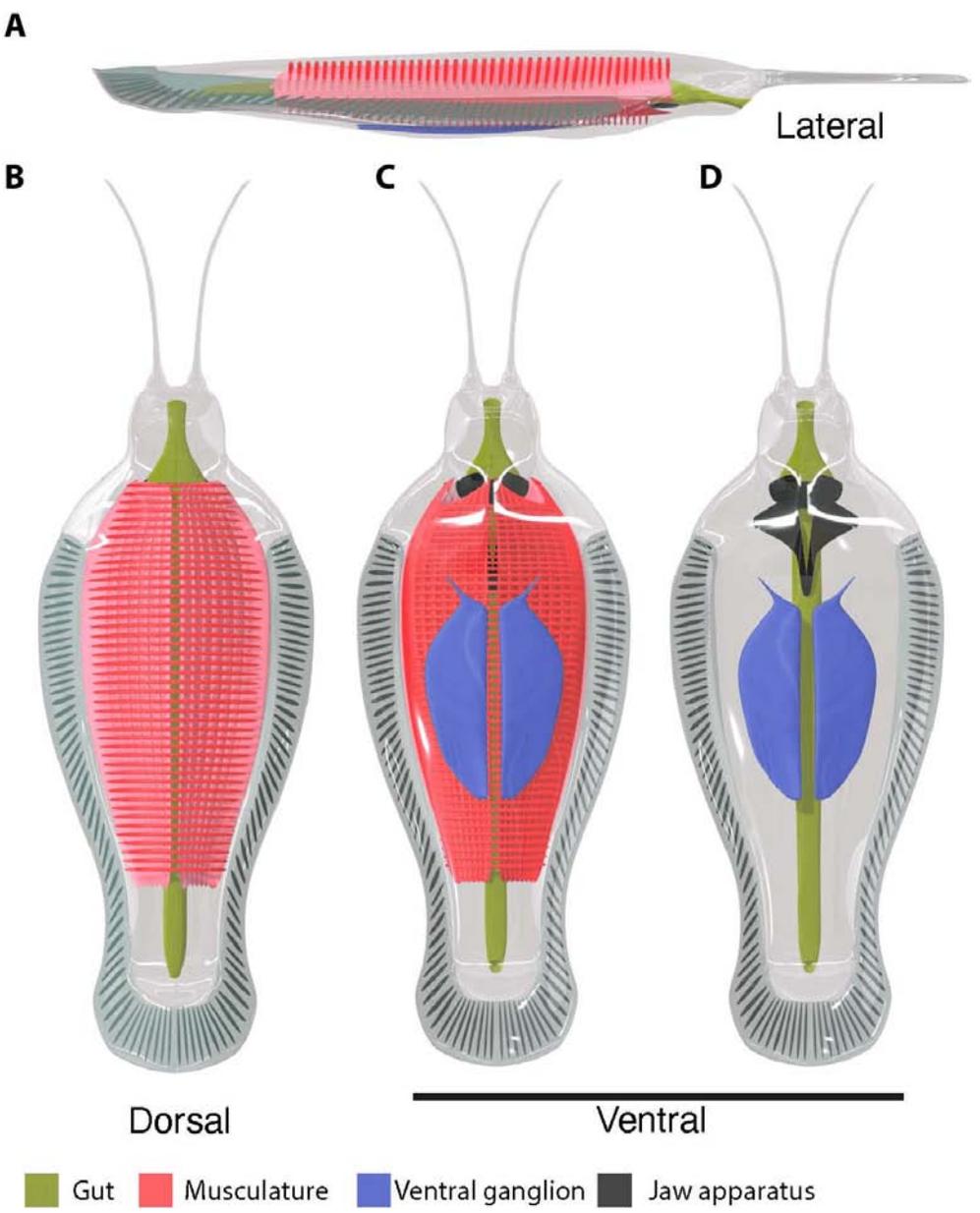
Here, we describe a large stem chaetognath, Timorebestia koprii gen. et sp. nov., from the lower Cambrian Sirius Passet Lagerstätte, which exhibits lateral and caudal fins, a distinct head region with long antennae and a jaw apparatus similar to Amiskwia sagittiformis.

Amiskwia has previously been interpreted as a total-group chaetognathiferan, as either a stem-chaetognath or gnathostomulid.

We show that T. koprii shares a ventral ganglion with chaetognaths to the exclusion of other animal groups, firmly placing these fossils on the chaetognath stem. The large size (up to 30 cm) and gut contents in T. koprii

suggest that early chaetognaths occupied a higher trophic position in pelagic food chains than today.

[Images show reconstructions. The worm was about 30 cm long.]



Mooney, E.D., et al (2024) **Paleozoic cave system preserves oldest-known evidence of amniote skin.** CURRENT BIOLOGY 34:doi.org/10.1016/j.cub.2023.12.008 (available as a free pdf)

Authors' abstract: *The richest and most diverse assemblage of early terrestrial tetrapods is preserved within the infilled cave system of Richards Spur, Oklahoma (289 to 286 megayears ago).*

Some of the oldest-known terrestrial amniotes are exquisitely preserved here because of early impregnation and encasement of organic material by oil-seep hydrocarbons within rapidly deposited clay-rich cave sediments under toxic anoxic conditions.

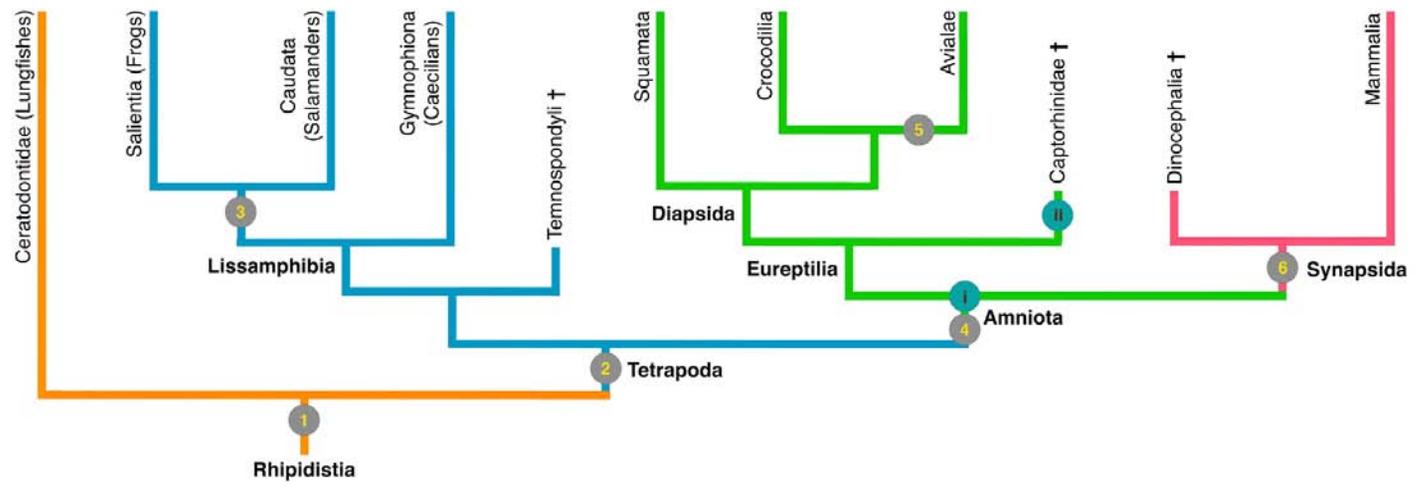
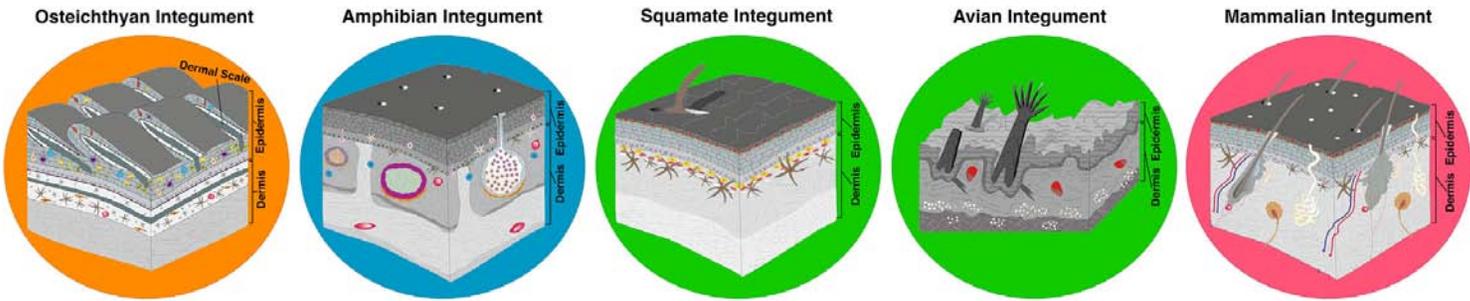
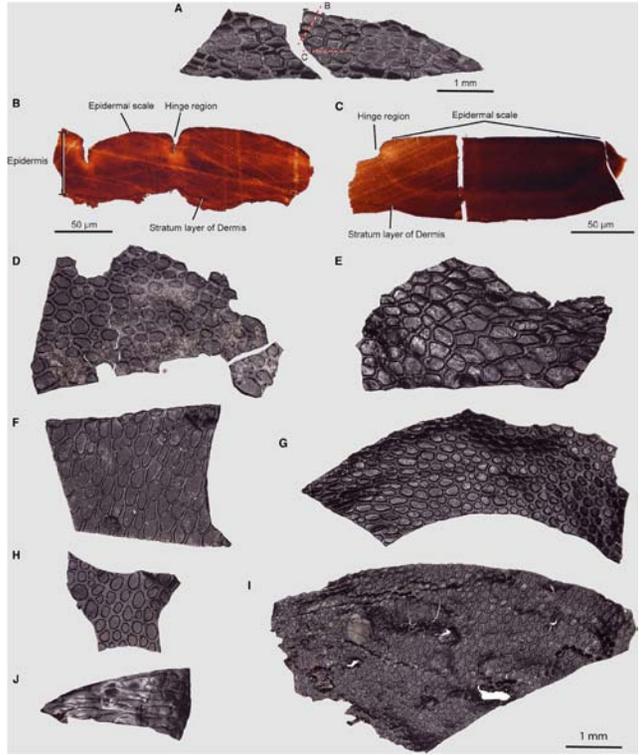
This phenomenon has also afforded the preservation of exceedingly rare integumentary soft tissues, reported here, providing critical first evidence into

the anatomical changes marking the transition from the aquatic and semiaquatic lifestyles of anamniotes to the fully terrestrial lifestyles of early amniotes.

This is the first record of a skin-cast fossil (3D carbonization of the skin proper) from the Paleozoic Era and the earliest known occurrence of epidermal integumentary structures. We also report on several compression fossils (carbonized skin impressions), all demonstrating similar external morphologies to extant crocodiles.

A variety of previously unknown ossifications, as well as what are likely palpebral ossifications of the deeper dermis layer of the skin, are also documented. These fossils also serve as invaluable references for paleontological reconstructions.

Chromatographic analysis of extractable hydrocarbons from bone and cave samples indicates that the source rock is the Devonian age Woodford Shale. Hydrocarbons derived from ancient marine organisms interacting with geologically younger terrestrial vertebrates have therefore resulted in the oldest-known preservation of amniote skin proper.



[Images are from this paper.]

Paleobiology: Primates.

Towle, I., et al (2023) **Tooth chipping patterns and dental caries suggest a soft fruit diet in early anthropoids.** AMERICAN JOURNAL OF BIOLOGICAL ANTHROPOLOGY 182:doi.org/10.1002/ajpa.24884 (available as a free pdf)

Authors' abstract: *Fossils from the Fayum Depression, Egypt, are crucial for understanding anthropoid evolution due to the abundance of taxa and the time interval they represent (late Eocene to early Oligocene).*

Dietary and foraging behavioral interpretations suggest fruits were their dominant food source, although hard foods (e.g., seeds and nuts) and leaves could have been important dietary components for particular groups.

In this study, we compare dental chipping patterns in five Fayum primate genera with chipping data for extant primates, to assess potential hard object feeding in early anthropoids.

Original specimens were studied (Aegyptopithecus: n = 100 teeth; Parapithecus: n = 72, Propithecus: n = 99, Apidium: n = 82; Catopithecus: n = 68); with the number, severity, and position of chips recorded.

Dental caries was also recorded, due to its association with soft fruit consumption in extant primates. Tooth chipping was low across all five genera studied, with a pooled chipping prevalence of 5% (21/421).

When split into the three anthropoid families represented, chipping prevalence ranged from 2.6% (4/154) in Parapithecidae, 6% (12/199) in Propithecidae, and 7.4% (5/68) in Oligopithecidae. Three carious lesions were identified in Propithecidae.

The chipping prevalence is low when compared to extant anthropoids (range from 4% to 40%) and is consistent with a predominantly soft fruit diet, but not with habitual hard food mastication.

The presence of caries supports consumption of soft, sugary fruits, at least in Propithecidae. Our results add support for low dietary diversity in early anthropoids, with soft fruits as likely dominant food sources.

Zhang, Y., et al (2024) **The demise of the giant ape *Gigantopithecus blacki*.** NATURE 625:/doi.org/10.1038/s41586-023-06900-0 (available as a free pdf)

Authors' abstract: *The largest ever primate and one of the largest of the southeast Asian megafauna, Gigantopithecus blacki, persisted in China from about 2.0 million years until the late middle Pleistocene when it became extinct. Its demise is enigmatic considering that it was one of the few Asian great apes to go extinct in the last 2.6 million years, whereas others, including orangutan, survived until the present.*

The cause of the disappearance of G. blacki remains unresolved but could shed light on primate resilience and the fate of megafauna in this region. Here we applied three multidisciplinary analyses, timing, past environments and behaviour, to 22 caves in southern China.

We used 157 radiometric ages from six dating techniques to establish a timeline for the demise of G. blacki. We show that from 2.3 million years ago the environment was a mosaic of forests and grasses, providing ideal conditions for thriving G. blacki populations.

However, just before and during the extinction window between 295,000 and 215,000 years ago there was enhanced environmental variability from increased seasonality, which caused changes in plant communities and an increase in open forest environments.

Although its close relative Pongo weidenreichi managed to adapt its dietary preferences and behaviour to this variability, G. blacki showed signs of chronic stress and dwindling populations. Ultimately its struggle to adapt led to the extinction of the greatest primate to ever inhabit the Earth.

Our current understanding of Gigantopithecus blacki derives from Early to Middle Pleistocene cave deposits in southern China between the Yangtze River and the South China Sea. This pongine is considered a key member of the Early to Middle Pleistocene Gigantopithecus, Sinomastodon, and Stegodon-Ailuropoda faunal zones of (sub)tropical oriental Asia, from about 2.0 million years ago (Ma) to 330 thousand years ago (ka).

It is known for its unusually large molars, atypical enamel thickness, estimated body height of about 3 metres and mass of 200 to 300 kg, making it the largest primate ever to have existed on Earth.

Dinosaurs.

Coules, V., and M.J. Benton (2023) **The curious case of Central Park's dinosaurs: The destruction of Benjamin Waterhouse Hawkins' Paleozoic Museum revisited.** PROCEEDINGS OF THE GEOLOGISTS' ASSOCIATION 134:doi.org/10.1016/j.pgeola.2023.04.004 (available as a free pdf)

Authors' abstract: *In May 1871, models and skeleton casts of dinosaurs and other ancient vertebrates destined for a new Paleozoic Museum in Central Park, New York were smashed and destroyed.*

This greatest act of vandalism in the history of dinosaur study and museum development was attributed to the infamous William 'Boss' Tweed, leader of a notorious group of rogue politicians who at the time held the reins of power in the booming city.

Our research on primary sources shows that Tweed was not involved, and the real villain was Henry Hilton, a powerful lawyer and businessman. Benjamin Waterhouse Hawkins had been employed to do the work and yet he was dismissed and not compensated, creating a scandal.

Contrary to the generally accepted narrative of these events, we find no religious motive for the destruction, only potential conflict with the developing American Museum of Natural History.

Further, based on well-reported evidence, we find that Hilton exhibited an eccentric and destructive approach to cultural artefacts, and a remarkable ability to destroy everything he touched, including the huge fortune of the department store tycoon Alexander Stewart.

Evidently the destruction of Hawkins' New York City dinosaurs was one of many such crazy actions through his life. Hilton was not only bad, but also mad.

Simón, M.E., and L. Salgado (2023) **A new gigantic titanosaurian sauropod from the early Late Cretaceous of Patagonia (Neuquén Province, Argentina)** ACTA PALAEONTOLOGICA POLONICA 68:doi.org/10.4202/app.01086 (available as a free pdf)

Authors' abstract: *A new gigantic titanosaur *Bustingorrytitan shiva* gen. et sp. nov. is described. The four specimens upon which this species is erected come from Neuquén Province, Argentina, from levels of the Huincul Formation (Cenomanian).*

*The phylogenetic analysis performed recovers *B. shiva* gen. et sp. nov. as a lithostrotian, the sister taxon of Saltasauridae. The estimated body mass is 67.297 metric tons (with a standard error of ± 17.228), which makes *B. shiva* gen. et sp. nov. one of the largest sauropods ever recorded.*

The record of this new sauropod corroborates the idea that gigantism (evolution of forms over the 50 metric tons) would have evolved many times within Eutitanosauria.

Taylor, M.P., and M.J. Wedel (2023) **Novel pneumatic features in the ribs of the sauropod dinosaur *Brachiosaurus altithorax*.** ACTA PALAEONTOLOGICA POLONICA 68:/doi.org/10.4202/app.01105 (available as a free pdf)

[Pneumatic bones occur in many vertebrates. They have hollow spaces within which are usually air-filled. Birds and pterosaurs used them to reduce body weight while maintaining bone strength. Sauropods and other large dinosaurs used them to reduce the weight of their heads and necks.]

Authors' abstract: *Pneumatic dorsal ribs are known for many sauropods, but to date costal pneumaticity has received relatively little attention. In particular, the pneumatic ribs of the holotype specimen of *Brachiosaurus altithorax* have been largely overlooked, although they present a unique configuration of pneumatic features.*

One rib, with a pneumatic foramen some distance down the shaft, was briefly described and illustrated in the early 20th century by Elmer S. Riggs. A second rib with a pneumatic foramen in the tuberculum of the rib has not previously been described or illustrated.

*This previously undescribed foramen is similar in location to those in some dorsal ribs of *Brontosaurus excelsus* and *Giraffatitan brancai*, but differs from them in both size and shape.*

The contrasting sites of costal pneumaticity in the holotype individual of *Brachiosaurus altithorax* emphasize the generally opportunistic mode of postcranial pneumatization, in both sauropods and other ornithomirans, but conform to models of pneumatization following vascularization.

In descriptions and analyses of fossil vertebrates, ribs have generally not been considered anatomically or phylogenetically important, and are often given only cursory treatment in even otherwise comprehensive descriptive work.

Among extant animals, crocodylians, birds, and mammals have pneumatic spaces in their skulls, but these are found in the postcranial skeletons of only one group: birds.

Among extinct animals, postcranial skeletal pneumaticity (PSP) is more widely distributed, occurring in pterosaurs, theropod dinosaurs (including birds) and sauropodomorphs, but not ornithischian dinosaurs.

Longrich, N.R., and E.T. Saitta (2024) **Taxonomic status of *Nanotyrannus lancensis* (Dinosauria: Tyrannosauroidae): A distinct taxon of small-bodied tyrannosaur.** FOSSIL STUDIES 2:doi.org/10.3390/fossils2010001 (available as a free pdf)

Authors' abstract: *Tyrannosaurs are among the most intensively studied and best-known dinosaurs. Despite this, their relationships and systematics are highly controversial. An ongoing debate concerns the validity of *Nanotyrannus lancensis*, interpreted either as a distinct genus of small-bodied tyrannosaur or a juvenile of *Tyrannosaurus rex*.*

*We examine multiple lines of evidence and show that the evidence strongly supports recognition of *Nanotyrannus* as a distinct species for the following reasons:*

1. *High diversity of tyrannosaurs and predatory dinosaurs supports the idea that multiple tyrannosaurids inhabited the late Maastrichtian of Laramidia;*

2. **Nanotyrannus* lacks characters supporting referral to *Tyrannosaurus* or *Tyrannosaurinae* but differs from *T. rex* in >150 morphological characters, while intermediate forms combining the features of *Nanotyrannus* and *T. rex* are unknown;*

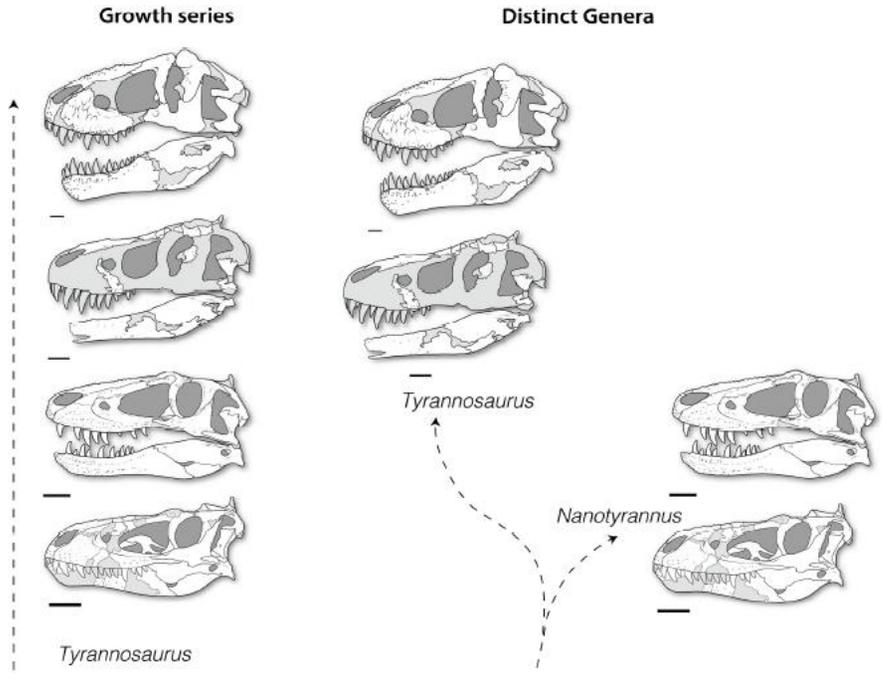
3. *Histology shows specimens of *Nanotyrannus* showing (i) skeletal fusions, (ii) mature skull bone textures, (iii) slow growth rates relative to *T. rex*, (iv) decelerating growth in their final years of life, and (v) growth curves predicting adult masses of ~1500 kg or less, showing these animals are subadults and young adults, not juvenile *Tyrannosaurus*;*

4. *Growth series of other tyrannosaurids, including *Tarbosaurus* and *Gorgosaurus*, do not show morphological changes proposed for a *Nanotyrannus*–*Tyrannosaurus* growth series, and deriving *Tyrannosaurus* from *Nanotyrannus* requires several changes inconsistent with known patterns of dinosaur development;*

5. *Juvenile *T. rex* exist, showing diagnostic features of *Tyrannosaurus*;*

6. *Phylogenetic analysis suggests that *Nanotyrannus* may lie outside *Tyrannosauridae*. *Tyrannosaur* diversity before the K-Pg extinction is higher than previously appreciated. The challenges inherent in diagnosing species based on fossils mean paleontologists may be systematically underestimating the diversity of ancient ecosystems.*

[Images show two possibilities. Either all the skulls are *T. rex* in different stages of its life or else the smaller skulls are a different species called *Nanotyrannus*.]



Botany.

Robinson, D.G., et al (2024) **Mother trees, altruistic fungi, and the perils of plant personification.** TRENDS IN PLANT SCIENCE 29:doi.org/10.1016/j.tplants.2023.08.010 (available as a free pdf)

Authors' abstract: *There are growing doubts about the true role of the common mycorrhizal networks (CMN or wood wide web) connecting the roots of trees in forests. We question the claims of a substantial carbon transfer from 'mother trees' to their offspring and nearby seedlings through the CMN.*

Recent reviews show that evidence for the 'mother tree concept' is inconclusive or absent. The origin of this concept seems to stem from a desire to humanize plant life but can lead to misunderstandings and false interpretations and may eventually harm rather than help the commendable cause of preserving forests.

Two recent books serve as examples: The Hidden Life of Trees and Finding the Mother Tree. We have analyzed the claims made in two highly popular books, which promulgate the idea that trees possess a number of human characteristics for which there is no sound scientific evidence.

A critical evaluation of the mother tree hypothesis also reveals that much of the data given in support of this concept is flawed and perhaps even non-existent. This concept is also incompatible with many well-known observations on the growth of forest trees.

Moreover, there is no evidence from peer-reviewed published studies to support the claim that mature trees in forests communicate preferentially with offspring through a common mycelial network.

It also remains unclear whether carbon compounds transmitted in the mycorrhizae actually enter the root tissue of the receiver tree. In any event, numerous studies indicate that the amounts of carbon transferred are physiologically insignificant.

Yu, J., et al (2024) **A plant virus manipulates the long-winged morph of insect vectors.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 121:doi.org/10.1073/pnas.2315341121

Authors' abstract: *Wing dimorphism is a typical phenotypic plasticity in insects. Most cases reported previously involve indirect regulation of plant viruses to wing dimorphism of insect vectors through host plants. Here, we revealed that a plant virus directly induces a long-winged morph in male insect vectors.*

This regulation is mediated by a species-specific unclassified gene, which was proven a downstream factor of the insulin/insulin-like growth factor signaling pathway. The long-winged insect vectors induced by viruses in turn facilitate viral long-distance dispersal and large-scale epidemics.

Wing dimorphism of insect vectors is a determining factor for viral long-distance dispersal and large-area epidemics. Although plant viruses affect the wing plasticity of insect vectors, the potential underlying molecular mechanisms have seldom been investigated.

Here, we found that a plant hopper-vectored rice virus, rice stripe virus (RSV), specifically induces a long-winged morph in male insects. The analysis of field populations demonstrated that the long-winged ratios of male insects are closely associated with RSV infection regardless of viral titers.

A plant hopper specific and testis-highly expressed gene, Encounter, was fortuitously found to play a key role in the RSV-induced longwinged morph.

Encounter resembles malate dehydrogenase in the sequence, but it does not have corresponding enzymatic activity. Encounter is upregulated to affect male wing dimorphism at early larval stages.

Encounter is closely connected with the insulin/insulin-like growth factor signaling pathway as a downstream factor of Akt, of which the transcriptional level is activated in response to RSV infection, resulting in the elevated expression of Encounter. In addition, an RSV-derived small interfering RNA directly targets Encounter to enhance its expression.

Environmental Science.

Mychajliw, A.M., et al (2023) **Coupled social and ecological change drove the historical extinction of the California grizzly bear (*Ursus arctos californicus*)**. PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON 290B:doi.org/10.1098/rspb.2023.0921 (available as a free pdf)

Authors' abstract: *Large carnivores (order Carnivora) are among the world's most threatened mammals due to a confluence of ecological and social forces that have unfolded over centuries.*

*Combining specimens from natural history collections with documents from archival records, we reconstructed the factors surrounding the extinction of the California grizzly bear (*Ursus arctos californicus*), a once-abundant brown bear subspecies last seen in 1924.*

Historical documents portrayed California grizzlies as massive hypercarnivores that endangered public safety. Yet, morphological measurements on skulls and teeth generate smaller body size estimates in alignment with extant North American grizzly populations (approx. 200 kg).

Stable isotope analysis of pelts and bones (n = 57) revealed that grizzlies derived less than 10% of their nutrition from terrestrial animal sources and were therefore largely herbivorous for millennia prior to the first European arrival in this region in 1542.

Later colonial land uses, beginning in 1769 with the Mission era, led grizzlies to moderately increase animal protein consumption (up to 26% of diet), but grizzlies still consumed far less livestock than otherwise claimed by contemporary accounts.

We show how human activities can provoke short-term behavioural shifts, such as heightened levels of carnivory, that in turn can lead to exaggerated predation narratives and incentivize persecution, triggering rapid loss of an otherwise widespread and ecologically flexible animal.

Human Prehistory.

Ao, H., et al (2024) **Concurrent Asian monsoon strengthening and early modern human dispersal to East Asia during the last interglacial**. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 121:doi.org/10.1073/pnas.2308994121 (available as a free pdf)

Authors' abstract: *The relationship between initial *Homo sapiens* dispersal from Africa to East Asia and the orbitally paced evolution of the Asian summer monsoon (ASM), currently the largest monsoon system, remains underexplored due to lack of coordinated synthesis of both Asian paleoanthropological and paleoclimatic data.*

*Here, we investigate orbital-scale ASM dynamics during the last 280 thousand years (kyr) and their likely influences on early *H. sapiens* dispersal to East Asia, through a unique integration of:*

- i) new centennial-resolution ASM records from the Chinese Loess Plateau,*
- ii) model-based East Asian hydroclimatic reconstructions,*
- iii) paleoanthropological data compilations, and*
- iv) global *H. sapiens* habitat suitability simulations.*

Our combined proxy-and model-based reconstructions suggest that ASM precipitation responded to a combination of Northern Hemisphere ice volume, greenhouse gas, and regional summer insolation forcing, with cooccurring primary orbital cycles of ~100-kyr, 41-kyr, and ~20-kyr.

*Between ~125 and 70 kyr ago, summer monsoon rains and temperatures increased in vast areas across Asia. This episode coincides with the earliest *H. sapiens* fossil occurrence at multiple localities in East Asia.*

*Following the transcontinental increase in simulated habitat suitability, we suggest that ASM strengthening together with Southeast African climate deterioration may have promoted the initial *H. sapiens* dispersal from their African homeland to remote East Asia during the last interglacial.*

Irving-Pease, E.K., et al (2024) **The selection landscape and genetic legacy of ancient Eurasians.** NATURE 625:doi.org/10.1038/s41586-023-06705-1 (available as a free pdf)

Authors' abstract: *The Holocene (beginning around 12,000 years ago) encompassed some of the most significant changes in human evolution, with far-reaching consequences for the dietary, physical and mental health of present-day populations.*

Using a dataset of more than 1,600 imputed ancient genomes, we modelled the selection landscape during the transition from hunting and gathering, to farming and pastoralism across West Eurasia.

We identify key selection signals related to metabolism, including that selection at the FADS cluster began earlier than previously reported and that selection near the LCT locus predates the emergence of the lactase persistence allele by thousands of years.

We also find strong selection in the HLA region, possibly due to increased exposure to pathogens during the Bronze Age. Using ancient individuals to infer local ancestry tracts in over 400,000 samples from the UK Biobank, we identify widespread differences in the distribution of Mesolithic, Neolithic and Bronze Age ancestries across Eurasia.

By calculating ancestry-specific polygenic risk scores, we show that height differences between Northern and Southern Europe are associated with differential Steppe ancestry, rather than selection, and that risk alleles for mood-related phenotypes are enriched for Neolithic farmer ancestry, whereas risk alleles for diabetes and Alzheimer's disease are enriched for Western hunter-gatherer ancestry.

Our results indicate that ancient selection and migration were large contributors to the distribution of phenotypic diversity in present-day Europeans. One of the central goals of human evolutionary genetics is to understand how natural selection has shaped the genomes of present-day people in response to changes in culture and environment.

The transition from hunter-gatherers to farmers, and subsequently pastoralists, during the Holocene in Eurasia, involved some of the most dramatic changes in diet, health and social organization experienced during recent human evolution.

These changes represent big shifts in environmental exposure, impacting the evolutionary forces acting on the human gene pool and imposing a series of heterogeneous selection pressures.

As human lifestyles changed, close contact with domestic animals and higher population densities are likely to have increased exposure to infectious diseases, introducing new challenges to our immune system.

Barrie, W., et al (2024) **Elevated genetic risk for multiple sclerosis emerged in steppe pastoralist populations.** NATURE 625:doi.org/10.1038/s41586-023-06618-z (available as a free pdf)

Authors' abstract: *Multiple sclerosis (MS) is a neuro-inflammatory and neurodegenerative disease that is most prevalent in Northern Europe. Although it is known that inherited risk for MS is located within or in close proximity to immune-related genes, it is unknown when, where and how this genetic risk originated.*

Here, by using a large ancient genome dataset from the Mesolithic period to the Bronze Age, along with new Medieval and post-Medieval genomes, we show that the genetic risk for MS rose among pastoralists from the Pontic steppe and was brought into Europe by the Yamnaya-related migration approximately 5,000 years ago.

We further show that these MS-associated immunogenetic variants underwent positive selection both within the steppe population and later in Europe, probably driven by pathogenic challenges coinciding with changes in diet, lifestyle and population density.

MS is an autoimmune disease of the brain and spinal cord that currently affects more than 2.5 million people worldwide. Its prevalence varies markedly with ethnicity and geographical location, with the highest prevalence observed in Europe (142.81 cases per 100,000 people).

Northern Europeans are particularly susceptible to developing the disease. The origins of and reasons for this geographical variation are poorly understood, yet such biases may hold important clues as to why the prevalence of autoimmune diseases, including MS, has continued to rise during the past 50 years.

Hess, T., et al (2023) **The first petrographic characterisation of a prehistoric rock crystal mine in the Swiss Alps.** SCIENTIFIC REPORTS 13:doi.org/10.1038/s41598-023-48914-8 (available as a free pdf)

Authors' abstract: *Over the past decades, there has been increasing evidence for the prehistoric use of rock crystal in mountainous environments, including craft specialisation and long-distance exchange.*

Yet there are only a few known sites where the mineral was quarried in sustainable quantities. One of them is situated near Fiescheralp in the Upper Valais (Switzerland) and dates to the Early Mesolithic and a final stage of the Neolithic.

Here we present the first petrographic characterisation of a prehistoric rock crystal mine in the Swiss Alps, involving a combination of different methods. The article provides a detailed description of the fluid inclusions within the quartz crystals and an overview over the related mineral paragenesis.

This gives interesting new insights into the formation of the analysed fissure and allows comparing rock crystal artefacts found in other archaeological sites to this particular source. The results form the basis for further investigations concerning the circulation and distribution of the raw material in the past.

The analysed assemblage consisted of 1,134 pieces and had a weight of 2,572 grammes. In the framework of typotechnological analyses, the objects were systematically investigated and drawings of the finds were created. Additionally, each piece was studied using a stereomicroscope.

Besides artefacts that are typical for an Early Mesolithic age, such as microliths and microburins, large blades and bifacially retouched tools, pointing to a younger stage of the Neolithic, were documented. It was possible to link the procurement site with several Mesolithic localities in the surrounding area that yielded radiocarbon dates between 8000 and 6500 BC.

According to current knowledge, it is the oldest site of this kind in the entire Western Alps. This makes it a significant archaeological discovery for the study of the use of resources in the past. As the Rhone Valley leads to a warm and dry climate, it is possible that the locality was already accessible at a relatively early stage of the Holocene.

Additionally, a recent radiocarbon date proves the presence of people at Fiescheralp during the Early Bronze Age, as part of a system of vertical transhumance. This links the site with the rock crystal workshop at Hospental-Rossplatten, dating to the Copper and Bronze Age.

[Image is from this paper and shows the crystals mined by the Mesolithic people.]



Charloux, G., et al (2024) **The ramparts of Khaybar. Multiproxy investigation for reconstructing a Bronze Age walled oasis in Northwest Arabia.** JOURNAL OF ARCHAEOLOGICAL SCIENCE: REPORTS 161:doi.org/10.1016/j.jasrep.2023.104355 (available as a free pdf)

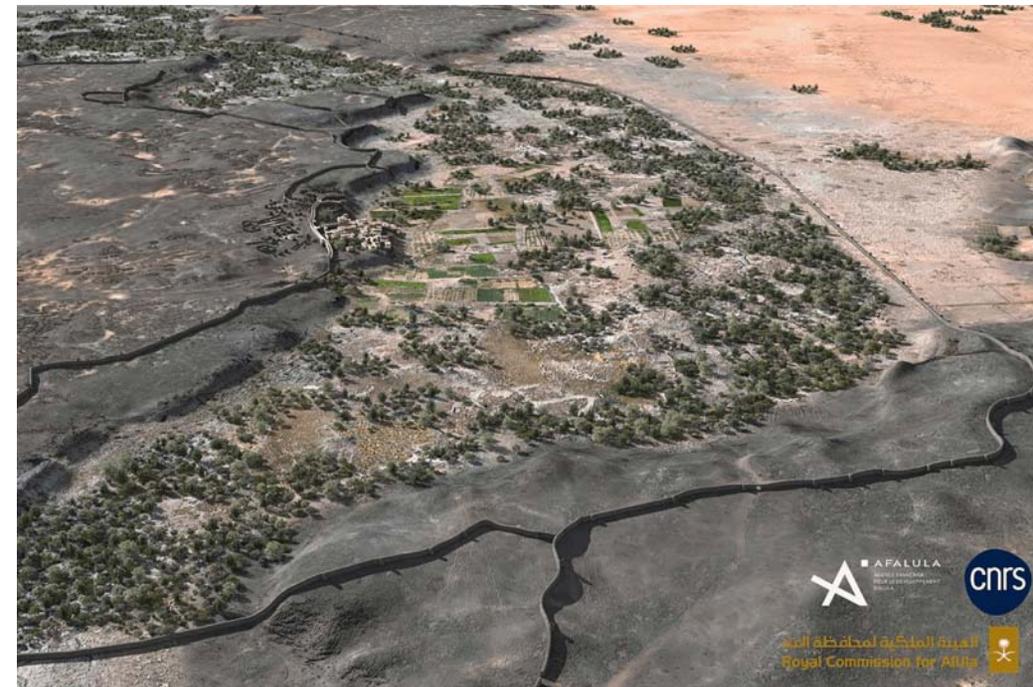
Authors' abstract: *The multidisciplinary investigation carried out between 2020 and 2023 by the Khaybar Longue Dur'ee Archaeological Project (CNRS-RCU-AFALULA) demonstrates that the Khaybar Oasis was entirely enclosed by a rampart in pre-Islamic times, like several other large regional walled oases in north-western Arabia (Tayma, Qurayyah, Hait, etc.).*

The cross-referencing of survey and remote sensing data, architectural examinations and the dating of stratified contexts have revealed a rampart initially some 14.5 km long, generally between 1.70 metres and 2.40 metres thick, reinforced by 180 bastions.

Preserved today over just under half of the original route (41 %, 5.9 km and 74 bastions), this rampart dates back to the Bronze Age, between 2250 and 1950 BCE, and had never been detected before due to the profound reworking of the local desert landscape over time.

This crucial discovery confirms the rise of a walled oasis complex in northern Arabia during the Bronze Age, a trend that proved to be central to the creation of indigenous social and political complexity.

[Image is from this paper and shows a reconstruction of the fortified oasis.]



Rostain, S., et al (2024) **Two thousand years of garden urbanism in the Upper Amazon.** SCIENCE 383:doi.org/10.1126/science.adi6317

[Contrary to popular belief, the Amazon jungle was not a pristine wilderness prior to the arrival of Europeans.]

Authors' abstract: *A dense system of pre-Hispanic urban centers has been found in the Upano Valley of Amazonian Ecuador, in the eastern foothills of the Andes.*

Fieldwork and light detection and ranging (LIDAR) analysis have revealed an anthropized landscape with clusters of monumental platforms, plazas, and streets following a specific pattern intertwined with extensive agricultural drainages and terraces as well as wide straight roads running over great distances.

Archaeological excavations date the occupation from around 500 BCE to between 300 and 600 CE. The most notable landscape feature is the complex road system extending over tens of kilometers, connecting the different urban centers, thus creating a regional-scale network.

Such extensive early development in the Upper Amazon is comparable to similar Maya urban systems recently highlighted in Mexico and Guatemala.

Modern Humans.

Lawton, R.I., et al (2024) **Longevity, demographic characteristics, and socio-economic status are linked to triiodothyronine levels in the general population.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 121:doi.org/10.1073/pnas.2308652121 (available as a free pdf)

Authors' abstract: *The hypothalamic-pituitary-thyroid (HPT) axis is fundamental to human biology, exerting central control over energy expenditure and body temperature. However, the consequences of normal physiologic HPT-axis variation in populations without diagnosed thyroid disease are poorly understood.*

Using nationally representative data from the 2007 to 2012 National Health and Nutrition Examination Survey, we explore relationships with demographic characteristics, longevity, and socio-economic factors.

We find much larger variation across age in free T3 than other HPT-axis hormones. T3 and T4 have opposite relationships to mortality: free T3 is inversely related and free T4 is positively related to the likelihood of death. Free T3 and household income are negatively related, particularly at lower incomes.

Finally, free T3 among older adults is associated with labor both in terms of unemployment and hours worked. Physiologic TSH/T4 explain only 1.7% of T3 variation, and neither are appreciably correlated to socio-economic outcomes.

Changes in T3 levels alter the function of tissues throughout the body. Clinically, hypothyroidism can lead to lethargy, weight gain, hypothermia, and depression, whereas hyperthyroidism can lead to weight loss, hyperthermia, agitation, restlessness, and hyperactivity, sleep disruption, and other manic-like symptoms.

The divergence between free T3 and free T4 at older ages is paralleled in our mortality findings. While increasing free T3 is protective against mortality, increasing free T4 is linked to higher levels of mortality, suggesting that the age-related decline in T3 and T3/T4 ratio have important impacts on longevity.

John, R.S., et al (2024) **High connectivity and human movement limits the impact of travel time on infectious disease transmission.** INTERFACE 21:doi.org/10.1098/rsif.2023.0425 (available as a free pdf)

Authors' abstract: *The speed of spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) during the coronavirus disease 2019 (COVID-19) pandemic highlights the importance of understanding how infections are transmitted in a highly connected world.*

Prior to vaccination, changes in human mobility patterns were used as non-pharmaceutical interventions to eliminate or suppress viral transmission.

The rapid spread of respiratory viruses, various intervention approaches, and the global dissemination of SARS-CoV-2 underscore the necessity for epidemiological models that incorporate mobility to comprehend the spread of the virus.

Here, we introduce a metapopulation susceptible–exposed–infectious–recovered model parametrized with human movement data from 340 cities in China.

Our model replicates the early-case trajectory in the COVID-19 pandemic. We then use machine learning algorithms to determine which network properties best predict spread between cities and find travel time to be most important, followed by the human movement-weighted.

However, we show that travel time is most influential locally, after which the high connectivity between cities reduces the impact of travel time between individual cities on transmission speed.

Additionally, we demonstrate that only significantly reduced movement substantially impacts infection spread times throughout the network.

Payzan-LeNestour, E., and J. Doran (2024) **Craving money? Evidence from the laboratory and the field.** SCIENCE ADVANCES 10:doi.org/10.1126/sciadv.adi5034 (available as a free pdf)

Authors' abstract: *Continuing to gamble despite harmful consequences has plagued human life in many ways, from loss-chasing in problem gamblers to reckless investing during stock market bubbles.*

Here, we propose that these anomalies in human behavior can sometimes reflect Pavlovian perturbations on instrumental behavior. To show this, we combined key elements of Pavlovian psychology literature and standard economic theory into a single model.

In it, when a gambling cue such as a gaming machine or a financial asset repeatedly delivers a good outcome, the agent may start engaging with the cue even when the expected value is negative. Next, we transported the theoretical framework into an experimental task and found that participants behaved like the agent in our model.

Last, we applied the model to the domain of real-world financial trading and discovered an asset-pricing anomaly suggesting that market participants are susceptible to the purported Pavlovian bias.