OPUNTIA 542


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Lunar New Year 2023

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.

A SECOND HAPPY NEW YEAR

photos by Dale Speirs

Calgary has the third largest Chinatown in Canada, with about 90,000 Chinese, so the Lunar New Year is a big deal in Cowtown. This city is a great one for parties year-round.

Calgary's Chinatown runs along the north boundary of the downtown core, along the banks of the Bow River. The event is spread over several weekends, culminating on the actual Lunar New Year, which was January 22 in 2023.

The cover photo was taken on Centre Street South in the heart of Chinatown. The rest of these photos were taken in the Chinese Cultural Centre a block away.

The dragon dancers came through the middle of the crowd, not a foot away from where I was standing.


重拾自信
活出精彩人生

Exterior views of the Chinese Cultural Centre.

LITTLE FREE LIBRARIES: PART 8
photos by Dale Speirs

[Parts 1 to 7 appeared in OPUNTIA #378, 427, 466, 482, 489, 502, and 523.]

Not for nothing is Calgary's nickname Cowtown. This homeowner on Charleswood Drive NW did some barn-raising.

These people don't get the idea of Little Free Libraries.

Hawkwood Boulevard NW

WEIRD FICTION: PART 8
by Dale Speirs

[Parts 1 to 7 appeared in OPUNTIAs #412, 458, 484, 493, 501, 511, and 536.]

January 19 was Edgar Allan Poe's birthday, so I'll throw in some weird fiction in his honour. The old-time radio series mentioned here are available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary.

The Ghosts Of Old-Time Radio.

THE WITCH'S TALE was an anthology radio series which aired from 1931 to 1938 in the USA. The series was syndicated to Australia and some of the surviving episodes on mp3 are from Down Under.

When this series began, mass broadcast radio was only a few years old, and like television in the late 1940s, everyone was still learning what techniques would work best. The plots of genre shows seem stereotyped today but back then they were fresh and exciting, for the most part. Just hearing voices out of the air was a generational change, especially for isolated farm folk.

The intro and outro of this series were by a witch who cackled and giggled before and after each sentence as she introduced the story. Her black cat Satan growled once or twice for punctuation.

"The Puzzle" was written by Alonzo Deen Cole and aired on 1934-09-07. A young man was onboard a train in England when he unexpectedly met his fiancée Julia's father. The gent came and went as if a ghost, and no one else could see him. He got off at an earlier station, saying he had business to look after but would be home the next day.

Upon arriving at Julia's house, the fiancé learned her father had gone missing two weeks ago with £50,000 in currency belonging to a business client. As that knowledge was imparted, a constable arrived with the bad news that the father's body had been found. He had been dead for two weeks.

The spectre had left behind in the train compartment his personalized cigarette case. Everyone agreed it must be a clue. What it signified was the puzzle, so stated repeatedly in case the listener missed the significance. What it was, was a piece of paper inside the case naming the killer.

The room lights suddenly went out. Of course they would. Even in 1934 that was a tired plot twist. Screams and alarums ensued as someone tried to grab the case in the dark. Julia became the detective and restaged the blackout. Her father's ghost appeared, or rather his voice was heard in the dark.

One of those present broke down from fright and confessed the crime. Having been avenged, the ghost bade farewell to one and all. Orchestral music swelled up and the witch cackled at the listener to return for next week's episode.

THE SHADOW, as the opening blurb put it, was in reality Lamont Cranston, wealthy young man about town. He had traveled to Tibet where he learned how to cloud minds so that people could not see him, only hear him.

Lamont Cranston and The Shadow both dealt with Police Commissioner Weston but not simultaneously. Weston was usually the arresting officer and frequently worked without any uniformed officers present. Not tenable in any real police department, where a real commissioner is a desk-bound bureaucrat and does not involve himself in individual cases.

The lovely Margo Lane was the only one who knew his real identity. Her main functions were to scream every time she saw a corpse, be frequently kidnapped or trapped with a killer, and to have the loose threads explained to her in the denouement.

"The Ghost Without A Face" was written by Joe Bates Smith and aired on 1946-03-10. A stage actor Gaylord Johnson went mad in a theatre just before curtain time, slashing his face bloody. Before dying he told a stagehand Billy he would return as a ghost to haunt the theatre forever.

Much time later, the theatre owner consulted Lamont Cranston about how to get rid of the ghost. With Margo Lane, he checked the theatre before the performance.

They met Pops, the elderly doorman at the back door. One of the actresses screamed from her dressing room that the ghost was with her. When everyone rushed there, she was gone.

Assorted alarums followed in the nights, including conversations with the ghost. It actually shouted "*Doom! Doom!*". Lane got in more than her regular quantity of screams plus just plain blithering.

The Shadow visited Billy, who was still mentally blocked from the trauma. He walked Billy through the incident and determined there was some uncertainty if Johnson was really dead. The listener will wonder about the competence of the medical examiner.

Sometime later Cranston and Lane went backstage again for fresh alarums. This time she was physically attacked by the ghost. The Shadow went up on the catwalk after Pops. One of them fell. No prizes for guessing who took the dive.

Pops was actually Johnson in disguise. In the epilogue as Cranston explained everything to Lane, he said Johnson had been told he would be laid off. The actor staged everything to ruin the theatre management in revenge.

Whom Do You Wish To Telephone?

THE REMAINS OF THE DEAD (2007) by Wendy Roberts was the first novel in the Ghost Dusters series. Sadie Novak, of Seattle, Washington State, operated Scene-2-Clean, which specialized in crime scene cleanups after the forensics squad left.

Sadie could see and talk to ghosts of murder victims, who loitered about hoping for justice or simply because they refused to believe they were dead. Since spectral testimony is not admissible in courts, she Marpled to bring justice for the dead where the police hadn't. Her sole employee, an ex-police officer Zack Bowman, knew she talked to ghosts but didn't have that ability himself.

The case at hand was the apparent murder-suicide of Trudy and Grant Toth. Sadie got the cleanup contract from the next of kin. Trudy's ghost appeared during the job and informed her that Grant didn't kill her and was murdered as she was.

The sleuthing exposed some Toth family secrets which the killer wanted to stay secret. There were alarums and threats, then the final confrontation. Except this time, so rare in cozy fiction, Miss Marple, that is, Sadie, had the gun and used it, saving the state the cost of a trial.

IF WALLS COULD TALK (2010) by Juliet Blackwell (pseudonym of Julie Goodson-Lawes) was the first novel in a cozy series about Melanie Turner, a home renovator in San Francisco.

At her latest project, she was visited by a ghost, contractor Kenneth Kostow, who had been on the job there until someone took him off the job with a nail gun and a circular saw. Melanie found herself Marpleing with a ghost at her heels.

Sharp practice abounded, with liens against the house, real estate flippers, and the possibility of diamonds hidden in the walls. Quite the confrontation but even the building inspector reformed in the end. Yes, an honest building inspector, which made this more of a fantasy than the ghost did.

Straightforward Ghosts.

GHOST OF A POTION (2015) by Heather Blake (pseudonym of Heather Webber) was set in Hitching Post, Alabama. Carly Bell Hartwell could see ghosts, too many of them. Patricia Davis Jackson was the battleaxe mother of Carly's boyfriend Dylan.

The two women did not get along. Carly was coerced by Patricia into attending a society costume ball. Enter Haywood Dodd, an ambitious social climber, who did not survive the party, which was indeed a night to remember. Patricia was found standing over the body, which was sufficient proof for the Deppity Dawgs.

In the days that followed, Haywood's ghost followed Carly about. He, or it, was in great distress. The alarums, casualties, and ghosts proliferated. There were a disputed inheritance, blackmailers, illicit children, and a variety of other soap operas.

The killer was a blackmailer whom Haywood was about to expose. He trapped Carly in the usual about-to-die denouement. Haywood's ghost saved her, or at least stalled the murderer long enough for the police to arrive.

IF YOU'VE GOT IT, HAUNT IT (2014) by Rose Pressey was about Cookie Chanel of Sugar Creek, Georgia. She opened a vintage clothing boutique, just what every rural village needs.

Cookie attended the estate sale of Charlotte Meadows, a wealthy socialite. Charlotte's ghost appeared to her, asking Cookie to find her murderer, plus offering some fashion advice. So it was that Cookie got into the Marpleing business.

Charlotte's ghost was worried that the news reports of her death would use a bad photo of her. The accepted belief is that ghosts cannot leave the place of their death, but Charlotte went riding with Cookie in her car. And so the sleuthing proceeded.

Each chapter was preceded with a useful hint about clothing or ghosts. For example, Chapter 16 began with: "*If you have a particularly ornery ghost, don't be afraid to sprinkle the holy water around.*" One doubts that method would work with Protestant or atheist ghosts. But I digress.

In the denouement, Cookie found the killer, who had been Charlotte's business partner. The murderer had been embezzling from her, and wanted to use the life insurance money to clear the books.

Ghost Hunting Clubs.

DEADLY SPIRITS (2017) by E. Michael Helms was a novel in a series about private investigator Mac McClellan of St. George, Florida, on the panhandle. His girlfriend Kate Bell convinced him to join with her in the Palmetto Paranormal Society. Club activities included investigating abandoned buildings for ghosts.

As the novel opened, the PPS executive suffered a vacancy when its president Prof. Ernest Bagwell died in an empty haunted hotel while the club was investigating. Supposedly he accidently fell down some stairs.

A few days later his secretary was on another PPS tour, this time to a haunted lighthouse. She fell or was pushed from the top. The question was whether she died from murder or suicide. We never get this sort of trouble at the philatelic society.

McClellan was busy with an insurance company case but managed to fit in some extra investigating. There were lots of back stories, only a few of which involved ghosts. At the local university, campus politics were extremely vicious. Faculty members had secrets worth killing for.

The PPS used spirit box recorders, ie, tape recorders, to gather evidence from the ghosts of the recently departed. Not surprisingly the judge refused to allow the recordings as evidence in court. Without admissible evidence nothing could be done, although McClellan and the PPS were satisfied the truth had come out.

Vampire Cozies.

BLED AND BREAKFAST (2013) by Michelle Rowen (pseudonym of Michelle Rouillard) had newlywed vampires Sarah Dearly and Thierry de Bennicoeur traveling to Salem, Massachusetts. They worked for The Ring, a council of vampires trying to keep the lid on things. Don't frighten the horses and all that.

Three vampires were missing under suspicious circumstances. Shortly after arriving in Salem, the de Bennicoeurs contact agent Owen Harper went up in smoke, not just figuratively. He left nothing but a stain on the ground. Whoever murdered him knew how to work a strong spell from a distance.

The suspicion was that there was an alpha witch somewhere in the vicinity. Harper's ghost soon appeared elsewhere, since he had unfinished business. That is to say, finding out who murdered him. Vampires can't do magic but witches can, so Salem was suddenly a dangerous place for the de Bennicoeurs.

As they hunted for clues, Sarah remarked "*It was like a really scary Easter egg hunt.*" Some of it involved time travel but the main problems were in the present. Sarah may have been a vampire but she was also a Miss Marple. This meant breaking and entering to find clues, contaminating crime scenes and evidence, and all the other fine traditions of Marpleism.

The alpha witch was finally located. She was all-powerful and invincible, but the de Bennicoeurs were booked for the series and she wasn't. The conclusion was therefore inevitable. Salem could rest peacefully and go back to being a tourist trap.

Go Ask Alice.

"Death By Bandersnatch" by Ira Nayman (2022 October, MYSTERY MAGAZINE, available from www.mysterymagazine.ca or Amazon print-on-demand) was a humourous short story narrated by private investigator Shlomo Schwartz, the Kosher Detective.

He spoke like any clichéd Brooklyn Jew you've ever seen on television, with Yiddish phrases liberally sprinkled throughout his dialogue. The Knave of Hearts hired Schwartz to investigate the murder of a King's Man at the Wonderland Circus.

The police arrested Alice but the Knave didn't believe she committed the crime. Schwartz circulated through the circus, dealing with characters such as the White Rabbit and the Red Queen. He settled on Professor Egghead, real name Irving Dumpty, brother of Humpty.

After Humpty had his great fall, the King's Men couldn't put him back together again, so they made an omelet and ate him. This caused much distress among the Dumpty family, who vowed revenge.

Paranormal Preserves.

THE PERFECTLY PROPER PARANORMAL MUSEUM (2016) by Kirsten Weiss was the first novel in a series about Maddie Kosloski of San Benedetto, California. As per standard cozy series, life in the big city had defeated her. She slunk back home and found herself in charge of the Paranormal Museum.

Her friend Adele Nakamoto was the daughter of a vineyard family. They were inspired by the museum to create a label of Haunted Vine zinfandels. The museum was the location of the initial corpse, who died messily in the first chapter.

The victim was Adele's archenemy. The Deppity Dawg Laurel Hammer had been the high school bully, so Maddie knew there would be no justice unless she began Marpleing.

Along the way, she had to operate the museum and deal with ghost hunters and a crazy taxidermist. A feline living at the museum, named G.D. Cat, helped with the sleuthing.

The denouement was a barnburner and not just figuratively. The murderer had been blackmailed by the victim for embezzling trust accounts. He didn't like Maddie sniffing around and tried to silence her by torching the museum with her in it. She had a smartphone and unlike most Miss Marples knew how to use it to call the police.

PRESSED TO DEATH (2017) was the sequel. Maddie Kosloski had restored the Paranormal Museum and bought a haunted grape press to upgrade the exhibits. Deppity Dawg Laurel Hammer had a complaint from Romeo Paganini that the press had been stolen. Maddie had a receipt from the consignor who sold it to her, countersigned by Romeo's wife Jocelyn.

The press was on display at the Harvest Festival but Hammer insisted on confiscating it. She was stymied when Romeo's son Leo, employed part-time at the museum, arrived and told her that his father was a liar.

Hammer gave up but soon had another angle on the case at the wine festival. Someone, yes it was Maddie, found the body of Romeo hidden in a wine vat. He never had a speaking part, poor fellow. Despite yellow Do-Not-Cross ribbon everywhere, the festival continued, as did the Marpleing.

A group called the Death Bistro booked the museum for a private function, keeping Maddie busy. She crossed swords with the Ladies Aid, who obtruded where they were not wanted in aid of their own ladies. The alarums and murders continued.

Maddie had the traditional gunpoint confrontation. The murderer had been trying to force the Paganini family to sell their vineyard. He didn't have much luck.

OTR: Shhh!

QUIET PLEASE was a radio anthology series that aired from 1947 to 1949. Episodes ranged from mystery to fantasy to weird fiction. Ernest Chappell was the narrator, assisted by one or two supporting actors. He had a rich voice that compelled attention. Some episodes are available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary.

"Symphony In D Minor" was written by Wyllis Cooper and aired on 1948-09-13. The protagonist Ray was part of a love triangle. He was canoodling Carol, wife of Johannes.

Her husband was a brilliant hypnotist. He put Ray under to the sound of a theremin and implanted a suggestion to kill Carol. Johannes didn't want to be implicated, so the instruction was that the next time Ray was alone with Carol in his apartment, he was to put on a record.

Not just any record but "Symphony In D Minor" by Cesar Frank. At a certain piano chord, Ray was to strangle Carol. The plan almost worked but just before the chord the power went out and the neighbourhood was blacked out.

Johannes had forgotten to implant an order in Ray to forget being hypnotized. In the blackout, he realized what he had been programmed to do and smashed the record. As the electricity came back on, he explained to Carol what happened.

They decided to arrange an accident for Johannes. She went home and acted nonchalant. He struck first and hypnotized her to kill Ray when she heard the symphony again. Ray arrived and defenestrated Johannes, staging it as a regrettable accident.

Ray liked to live dangerously. Johannes' body hadn't even cooled off but Ray played the symphony on a fresh record to demonstrate he was now immune to the piano chord. He didn't know about the twist. When the chord sounded, Carol snatched up a knife and stabbed Ray to death. She was now bereft of both men in her life. The police would have little difficulty proving a double murder.

"The Oldest Man In The World" was written by Wyllis Cooper and aired on 1949-05-21. The narrator Lucas and his friends Lucille and Harry were biking in the Pyrenees when a storm made them take shelter inside a cave.

Lucille went exploring into the back of cave. She found a caveman's footprint in hardened sediment from 20,000 years ago. Harry fell into a deep hole. Pushed actually, by Lucas, and Lucille saw him do it.

She had been with Lucas before Harry came along and married her. The jealousy was still there, and when Lucas saw his opportunity, he took the chance. Unfortunately the plan failed.

Lucas tried unsuccessfully to convince her that Harry slipped and he had grabbed to save him rather than pushing. There were some steps along the side of the chasm, so Lucas descended.

Harry was still alive down there. The two men found themselves in a cavern with an ancient altar and Cro-Magnon markings on the walls. There were two very lifelike statues, one of a caveman and the other of a bear.

The two men fought to the death, and Lucas won. He made his way back up to Lucille and killed her rather than face the noose. He dropped her into the chasm. In the epilogue, he claimed it wasn't him who murdered Harry. The killer was a caveman, still alive after 20,000 years.

LITERA SCRIPTA BIBLIOTHECA: PART 3

by Dale Speirs

[Parts 1 to 2 appeared in OPUNTIAs #512 and 526.]

Weird Libraries.

WORLDSOUL (2012) by Liz Williams was a fantasy novel set in the city of Worldsoul, on a node between Earth and other dimensions called the Liminality. The governing elite had been the Skein but they suddenly vanished.

The protagonist was a librarian Mercy Fane. She and her colleagues kept busy trying to stop creatures from escaping out of books, coming to life, and wreaking havoc in the city. Her sidekick was an alchemist named Shadow.

The library was the Alexandria library of Egypt, transported to safety just as it caught fire. The ancient scrolls within were now releasing demons, djinns, and trolls. They were quick to mingle into all the conspiracies and feuds that suffused the human population. Everyone was up to something, none of it good. Two different factions were planning coups to replace the missing Skeins.

A sword fight in the library stacks demonstrated that being a librarian in Worldsoul was active combat duty, not just restacking codexes and scrolls. Much ado and many alarums. Some plot threads were tied off but several were left dangling for a sequel.

THE MIDNIGHT LIBRARY (2020) by Matt Haig addressed a theme everyone has considered at one time or another in their lives. We have all done things we regret having done or not done things we should have done. What if we could have a second chance and avoid those mistakes?

The protagonist was Nora Seed, who had a chance for a do-over when she found herself in the Midnight Library. She wasn't dead from suicide by overdose as she thought, nor was she alive. The librarian Mrs Elm told her she was halfway in between, in the Library.

Nora could choose any book to start her life on a different divergence. And so she did, living an alternative that might have been. Book after book, each time returning to the Midnight Library to check out another tome from Mrs Elm.

One life after another, each never as she imagined it would be. Eventually she found the book she was looking for, the one she had already been living.

With that choice, the Library dissolved. She woke up in hospital having survived her overdose, and learned that life is a matter of perspective, not circumstances.

DEATH ON THE SHELF (2021) by Allison Brook (pseudonym of Marilyn Levinson) was the fifth novel in a series about librarian Carrie Singleton of Clover Ridge, Connecticut. Her library was haunted by a ghost named Evelyn and had a cat named Smoky Joe, both of whom assisted in her Marpleing.

The death toll began at a wedding reception where the husband of the host fell dead into a chocolate fountain. The bride's family were not a happy bunch. Just within them there were plenty of suspects, nevermind the outsiders. The deceased was not missed. The medical examiner said he had been poisoned.

The bride was Angela Vecchio, a co-worker at the library. Lots of ugly details were uncovered as Carrie snooped. Librarians use computers these days instead of paging through newspaper microfilms.

Carrie found a bumper crop of information that would indict half the county. Evelyn helped out by eavesdropping on conversations in the library. Only Carrie could see and talk with her, so she made a great spy.

As do all Miss Marples, Carrie got herself trapped with the killer. She followed the murderer to a lonely cabin in the woods. This is a common failing in cozies because there is no suspense in the outcome. Since she was the continuing protagonist in the series, there was no doubt she would survive.

And so back to life at the library. Evelyn approved of the return to normalcy, such as it was.

Cozy Libraries.

KILLER LIBRARIAN (2012) by Mary Lou Kirwin was the first novel in a series about Karen Nash, a librarian in Sunshine Valley, Minnesota. Her dream trip to London, England, with her boyfriend Dave Richter became a nightmare when he dumped her and instead went with his new girlfriend Kirstin.

Quicker than you can say 'stalker', Karen booked herself on the same flight. The trip was a tour of London's literary highlights. In between visiting sites associated with mystery writers, Karen obsessed about Dave. She was the heroine, remember.

Staying at a bed-and-breakfast, she found another guest had died sitting in a chair while reading a book. The tome was a first edition of WINNIE THE POOH. His widow, who didn't grieve, said he hated the book. The question was if he had been murdered by poison.

The bed-and-breakfast was run by bibliophile Caldwell Perkins. He took Karen for a drive to Hay-on-Wye, the book town in Wales. He later took her romantically.

The death was eventually resolved as accidental poisoning. Dave left Kirstin and tried to win back Karen but to no avail. He departed the plot and this world in London while crossing the street. As any North American would do, he looked to the left before crossing and was run over by a bus. He forgot the British drive on the wrong side of the road.

Karen went back to sunny Minnesota and Caldwell followed her. Unfortunately she also had to escort Dave's body back.

KILLER RESEARCH (2021) by Jenn McKinlay was a novel in a cozy series about Lindsey Norris of Briar Creek, Connecticut. She was the library director and murder detector.

One of her staff, librarian Ms Cole (no first name ever given), was running for mayor against the incumbent Hensen (also no first name given). He was not pleased, nor was she when somebody dumped a body in the trunk of her car. Talk about dirty tricks.

The librarians united around their favourite, while the mayor muttered something about the library budget. Hensen was happy to pin the murder on Cole. The campaign was nasty.

Finally the killer, a woman scorned by the victim, was nabbed. So was Hensen, for inappropriate use of public property and funds. The path was left clear for Ms Cole to become Her Honour The Mayor.

Little Free Libraries.

Calgary must have several hundred Little Free Libraries by now, and worldwide they would number in the tens of thousands. Homeowners place them on their front boulevard. The LFLs operate on the take a book, leave a book principle.

SHE STOPPED FOR DEATH (2017) by Elizabeth Kane Buzzelli was a novel in a cozy series about Jenny Weston and her mother Dora of Bear Falls, Michigan. A local recluse Emily Sutton, a minor poet with one published volume quickly remaindered, began leaving poems in the Weston LFL.

That set off a chain reaction of people snooping into each other's past. The kind of people hell bent on bringing sunshine into everyone's life, whether they wanted it or not.

The discovery of a murdered woman's body set the plot in motion, shifting up a gear when a young woman arrived searching for her missing uncle, also a poet.

Lots of nasty back stories, culminating in a house set on fire by an arsonist. The Sutton sisters had exchanged identities and there was a murder long ago. In the epilogue, a grateful survivor erected a marble statue of a book with one of Emily's poems engraved on the pages.

Private Libraries.

GOING OUT WITH A BANG (2008) was a 30-story mystery anthology edited by Joan Boswell, Linda Wiken, and Barbara Fradkin. "The Thrill Of The Chase" by Mary Keenan was a humourous story about Gilbert Harrington, librarian to the Culpepper Estate Memorial Library.

This was the private enclave of Wilhemina Culpepper, daughter of the original Culpepper. She was lackadaisical about the library and keeping the books in good condition.

Harrington decided to stage an accident to kill her and allow her cousin Frederick to inherit, a man who would manage the place much better. Simultaneously Wilhemina decided to kill Harrington, whom she found annoying but was unable to dismiss from the job.

Neither realized what the other was doing. What followed was a concatenation of exotic means of murder attempts, from mushroom soup made with poisonous morels to sawing out the supports of a balcony.

Both led charmed lives but Harrington finally lost, not because of her but because of a clever twist that happened outside the estate. Clever, because at the beginning of the story the setup for the twist was established.

Archives.

"The Morgue" by Leland Neville (1983 November, ELLERY QUEEN MYSTERY MAGAZINE) was narrated by an unnamed newspaper reporter who was also in charge of the file of old newspapers, commonly known as the morgue. He was accosted by an armed intruder who demanded the file containing the 1922-02-21 issue.

That issue was then destroyed. The narrator checked other libraries and found the man had managed to infiltrate and destroy all their copies. Eventually the reporter identified the culprit, a 1950s television actor named Walter Lackey.

The destroyed issues contained a vicious review of Lackey's performance in his stage premiere. His television show had been wiped by the network archives to re-use the tapes. There was no proof that he ever existed on the stage except that one bad review.

Lackey resented the idea that when he died the only proof of his existence would be the review. If he was going to fall into obscurity, then he wanted no traces left behind.

PHILATELIC FICTION: PART 5
by Dale Speirs

[Parts 1 to 4 appeared in OPUNTIA #417, 479, 498, and 522.]

It's In The Mail.

The private detective Nick Carter first appeared in print in 1886, predating Sherlock Holmes, and often appeared on stage and in movies. Nick Carter appeared in his own pulp magazines and dime novels, written by house authors. Some of the pulp magazines are available on www.gutenberg.org.

NICK CARTER, MASTER DETECTIVE aired on old-time radio from 1943 to 1955. Episodes are available as free mp3s from www.otrr.org/OTRRLibrary.

In this incarnation, he had boundless confidence in his ability and came across as arrogant to all, including his secretary/girlfriend Patsy Bowen. He had his own laboratory, a huge library, and kept better files than the FBI.

"The Case Of The Vanishing Postman" was written by Alfred Bester (yes, the science fiction author) and aired on 1945-08-26. Nick Carter and Patsy Bowen were out and about when they discovered in an alley a weathered lettercarrier's mail sack.

The postman Robert Draper had vanished seven years ago while walking his route. A registered packet containing $10,000 in bearer bonds went with him. An innocent man was convicted of his murder.

Carter decided to deliver the remaining letters and question each addressee in the hopes of finding clues. A federal offense, since only posties can handle the mail, and if there was a crime, a postal inspector would handle the case. However, Carter wouldn't get the glory, and his name was on the marquee, not some postal inspector.

The culprit was identified as Draper's son-in-law Barnes, who had not murdered him. He did shoot him in the head but not fatally. Draper wandered about dazed until he was picked up and taken to an institution. No one knew who he was and he had been detained there ever since.

One of the items in the mailbag was a postcard from the man convicted for the crime. That established an alibi for him since he was indeed out of town on the day Draper went missing. Barnes would now go up the river in his place.

THE WHISTLER was a radio anthology series which aired from 1942 to 1955. Available as free mp3s from www.otrr.org/OTRRLibrary This was not a mystery show. Both the narrator and the protagonist explained everything to the listener as a perfect crime was plotted and carried out.

The criminal would gloat after the crime and get in a few bwah-ha!-ha!s. After the final commercial, the epilogue would reveal some little detail the criminal overlooked that tripped him up and brought him to justice.

"Death Laughs Last" aired on 1945-10-08, no writer credited. Eddie Lamar apparently committed suicide but his business partner Clint Garvey knew better because he had murdered him. A perfect crime, but Garvey was eaten by frustration because he couldn't brag about it to anyone.

Garvey was held up by a hitchhiker who stole everything, his wallet and his car. He had $100 in his shoe, so he was able to get by. In those days, a good motel room cost $4 a night, so he got a room with no trouble.

The hitchhiker crashed the car and was burned alive. Initial radio news reports said the police had identified the body as Garvey. That got him thinking, so he wrote an anonymous letter to a newspaper identifying Garvey as Lamar's killer and calling the police fools. He just had to get it off his chest to assert his superiority.

Garvey mailed the letter at a corner street box next to a Signal service station. The next day a news report corrected the identification. The autopsy revealed the hitchhiker's true identity was someone else. The police were now seeking Garvey.

He raced to the street letter box where a lettercarrier had just cleared the box. The postie explained (and it is indeed true in both the USA and Canada) that once a letter enters the mailstream, it becomes the property of the addressee and cannot be handed back.

Garvey wouldn't take no for an answer. He rendered the postie unconscious and ransacked the van but couldn't find the letter. From there he embarked on

a frantic chase. First to the post office, but they had put the mail on a plane. He rushed to the airport and commenced a nightmarish saga, trying to beat the letter to its destination.

He made it to the newspaper office in time to intercept the mail bag. Before he could find the actual letter, a federal agent arrested him on assault and mail theft charges. After the final commercial from Signal Oil, the twist came.

The letter wasn't there. Garvey had mailed it with insufficient postage and it had been returned to the post office. Because it was anonymous, the posties opened the envelope and read the letter trying to find the sender's name.

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

All the episodes were written by Scott Bishop. They were a mixture of science fiction, fantasy, weird, and twist mysteries. Available as free mp3s from www.otrr.org/OTRRLibrary

"The Letter From Yesterday" was written by Scott Bishop and aired on 1942-05-01. The episode opened in a library where Adam Chase fell in love with the librarian Cicely. The courtship was interrupted when he failed to return from a business trip.

His letter was never received because of a mail robbery. He thought she had forsaken him. All worked out in the end, the misunderstanding was resolved, and they were married.

One day while working in the attic, Adam found a mail bag full of unopened letters from 50 years ago. One of them was from Cicely's father to Adam's mother. The text of the letter paralleled their lives exactly. That mail had also been stolen, but the result had been different. They had never married each other.

MURDER THROUGH THE ENGLISH POST (2022) by Jessica Ellicott (pseudonym of Jessie Crockett) was a novel in a series set in rural England circa the 1930s. Two Miss Marples, named Beryl Helliwell and Edwina (surname not given) had done so well that they opened a private enquiries bureau.

There was trouble in the village of Walmsley Parva. Someone was sending anonymous poison pen letters to villagers. The letters were composed of words cut out from newspapers and mailed through a street letter box.

The accusations were fake but had enough plausibility to start fistfights and produce a murder. In every village the postmistress is the centre of gossip, so she briefly came under suspicion. Since most of the villagers received the poison pen letters, attention shifted to someone else who knew their secrets, the local doctor.

He was indeed the self-righteous culprit, determined to purge the villagers of their sins. In the denouement, Beryl and Edwina confronted him about the letters. He confessed, blabbed all, then smoked a poisoned cigarette he had prepared for such an eventuality. Justice was served, if not in the courts.

Stamping Around Town.

"The Three Cent Stamp" aired on 1951-01-14 on THE RED SKELTON SHOW. That was indeed the cost for Americans to mail a first-class letter when this episode first aired.

Red Skelton was one of the greatest comedians of stage, radio, and television. He was an excellent ad-libber, and if a joke went flat he could snap out a one-liner to quickly recover. The scripts, such as this episode, were often buried by off-track quips with his cast.

The premise of this radio episode was simple. Skelton needed a 3-cent stamp to mail an important letter but couldn't find one at home. He checked his wife's purse, to the sound effects of clattering and clanking as everything fell out when he upended the purse.

The narrative paused for a song, since the show was a variety programme, not a sitcom. Returning to the plot after a commercial, a friend dropped by. Skelton asked for a ride to the post office, where they met in the lobby an acquaintance who was a boxer with a glass jaw and more than a little punch drunk (Skelton doing a weird voice).

Eventually the plot got back on track and Skelton stood in line to buy a stamp. Just as he got to the window, the postie shut down because it was closing time. Skelton went to a drugstore nearby to buy a stamp.

The clerk there spoke with a Noo Yawk gangster accent. He grumbled that he was fed up with people spending trivial amounts such as buying a 5-cent package of chewing gum. That put Skelton in a quandary.

Bravely Skelton ordered a variety of items to bring the order up to a reasonable amount of dollars, then asked for a 3-cent stamp. The order was filled for everything but the stamp. The clerk apologized and said he had just sold his last stamp to the woman now leaving the store, the one with a rotten little kid handcuffed to her.

Skelton rushed after her but she had driven off. He chased her. The dialogue switched to her and her son Junior. The latter was voiced by Skelton as Junior, one of his stock characters, a mean little kid always causing trouble.

Mother saw Skelton following her and assumed the worst. When he pulled up in front of their house, they feared an attack. But first more diversions before the misunderstanding was cleared away.

Mother was aghast when Junior told her he had used all the stamps to mail his frog to a friend in New York City. "*The post office is going to be hopping tomorrow!*", he said.

Suddenly there was a cutaway to an instrumental by the orchestra, followed by a commercial. Once back in the story, Skelton emphasized to his friend the importance of getting his letter mailed. The missive contained a patent for a machine that did the work of 10,000 men but required 10,000 men to operate it.

They saw a man standing at a street letter box. Thinking he might have a stamp, they went over and asked if he was mailing a letter. He was so drunk he couldn't get his letter through the slot because the box kept swaying back and forth (another Skelton voice).

The drunk opened the letter, from his wife to her mother, and read that she was inviting Mama to come stay with them. That was enough to decide him not to mail the letter, so he gave Skelton the stamp. Skelton triumphantly mailed his letter. Just as he dropped it into the box he realized he had forgotten to address it.

The Stamp Of Death.

THE CHINESE ORANGE MYSTERY was a 1934 novel by Ellery Queen (pseudonym of cousins Frederic Dannay and Manfred B. Lee) reprinted in 2018 by Otto Penzler. The pseudonym and the protagonist were both Ellery Queen.

The plot began with a man visiting the office of Donald Kirk, publisher and stamp collector. The secretary James Osborne told him Kirk wasn't in at the moment, and asked him to be seated in a waiting room. Several other visitors came and went but none chose to wait for Kirk's return.

Later that day, Kirk arrived with Ellery Queen. Walking into the waiting room, they found the body of the unknown man. His clothes had been turned inside out or put on backward. The floor lamps and rugs had been turned upside-down, and the paintings and clock turned around to face the wall. There was no identification on the victim.

Osborne was the last person to see the man alive. In addition to being confidential secretary, Osborne also curated Kirk's stamp collection, mostly early Chinese rarities.

Foochow error stamps became the MacGuffins of the plot. Assorted alarums and excursions followed, interspersed with infodumps about stamp collecting.

Everything led to a J'accuse! meeting staged like a play to catch the conscience of the killer. Queen constructed an elaborate re-enactment of the murder. Too, too unbelievable but that is how mysteries were plotted back in the 1930s.

The dead man had come to sell a rare stamp, the Chinese Orange. Osborne couldn't resist the opportunity to steal it, killing the man in the process. Since it was an unscripted spur-of-the-moment murder, the reader will find difficulty in believing the aftermath of turned clothing.

Collecting.

LET GEORGE DO IT aired on radio from 1946 to 1954.. Available as free mp3s from www.otrr.org/OTRRLibrary The series was about George Valentine, a private investigator. His secretary/girlfriend was Claire Brooks.

"Cover For An Hour" aired on 1950-09-18 and was written by David Victor and Jackson Gillis. The client Joe appeared in person at George Valentine's office. He was a deliveryman who told Valentine that he had overheard a conversation about beating someone to death.

Anyone else would have gone to the police but this working man decided to hire a private detective. He then suddenly attacked Valentine and rendered him unconscious. An hour later Claire Brooks found him tied up in the closet. The delivery service said they had no employee named Joe.

Joe had left a bulky envelope addressed to an investment firm run by J.W. Wagner. They never heard of him either. The envelope was opened but contained only blank paper. The conclusion was that someone wanted to use Valentine's office for an hour to carry out some sort of imposture.

Back to the office where a woman Sue, not knowing who he was, told Valentine she had been hired as a stenographer for him. There was a body lying there, which she identified as Valentine. The police located Joe, who said he had been hired by the dead man to stage the incident.

A bundle of envelopes was on Valentine's desk, one of which was dated 1851, to which no one paid attention. Further clues among the envelopes led to a nearby hotel and the body of an out-of-towner named Cruikshank.

On him was a letter carbon copy saying he had the cover and was expecting the money. It had been addressed to Wagner, and with it was the reply, a cheque for $50,000. Everyone assumed it was blackmail.

Most listeners then and now, and the characters, assumed "the cover" was a euphemism for blackmail. Philatelists such as myself, however, immediately recognize the term. In stamp collecting, a cover is the combination of an addressed envelope that went through the mails plus the stamp, postmark, and other postal markings.

Sue was the murderer. The explanation was complicated, with imposters believing each other was trying to blackmail Wagner. They thought that was what Cruikshank was doing, unaware that Wagner was a collector buying a cover with a valuable stamp on it.

The imposters had thinned each other out in Valentine's office. Sue, as the last one standing, would fry in the electric chair. In the epilogue the cover was identified as having an Hawaiian 2-cent stamp, valued at the time for $15,000, said Valentine.

The stamp was what collectors today call Missionaries, the first postage stamps issued by the Kingdom of Hawaii. The stamps were used mostly by missionaries writing home, since the Hawaiians were illiterate. An 1851 cover with a Missionary stamp would today be worth millions.

SEEN IN THE LITERATURE

Astronomy.

Rhoads, J.E., et al (2023) **Finding peas in the early universe with JWST.** ASTROPHYSICAL JOURNAL LETTERS 942:doi.org/10.3847/2041-8213/acaaaf (available as a free pdf)

[JWST is the James Webb Space Telescope. Green Pea galaxies were the first to form after the Big Bang. The Cosmic Dawn occurred about 100 megayears after the bang when interstellar gas and stars began forming and emitted light. The Epoch of Reionization then took place, when subatomic particles became electrically charged and much of the universe became transparent.]

Authors' abstract: *The Early Release Observations (EROs) of JWST beautifully demonstrate the promise of JWST in characterizing the universe at Cosmic Dawn. We analyze the Near Infrared Spectrograph ERO spectra of three z ~8 galaxies to determine their metallicities, gas temperatures, and ionization.*

These galaxies offer the first opportunity to understand the physical properties of Epoch-of-Reionization galaxies through detailed rest-optical emission-line spectroscopy.

Since the spectra are some of the earliest science data from JWST, we compare several line ratios with values expected from robust physics, to validate our measurement procedures.

We compare the abundances and emission-line ratios to a nearby sample of Green Pea galaxies, a population of nearby emission-line galaxies whose UV properties resemble Epoch-of-Reionization galaxies, and which often have large Lyman continuum escape fractions.

The JWST data show striking further similarities between these high-redshift galaxies and nearby Green Peas. The z ~8 galaxies span the metallicity range covered by Green Peas.

They also show the compact morphology that is typical of emission-line-dominated galaxies at all redshifts. Based on these similarities with Green Peas, it is likely that these are the first rest-optical spectra of galaxies that are actively driving cosmological reionization.

JWST was built to visit a time when galaxies were young. In its first public release of scientific data, it has done exactly that, with rest-frame optical spectroscopy of three galaxies in the epoch of Cosmic Dawn (at redshifts z>7), as well as deep imaging of a cluster field, which provides extra magnification due to gravitational lensing.

In one sense, these are automatically young galaxies, for they are observed when the universe itself was about 700 megayears old, or about 5% of its current age.

O'Callaghan, Jonathan (2023) **Star graveyard revealed in super-clear image of the Milky Way.** NATURE 613:doi.org/10.1038/d41586-023-00110-4

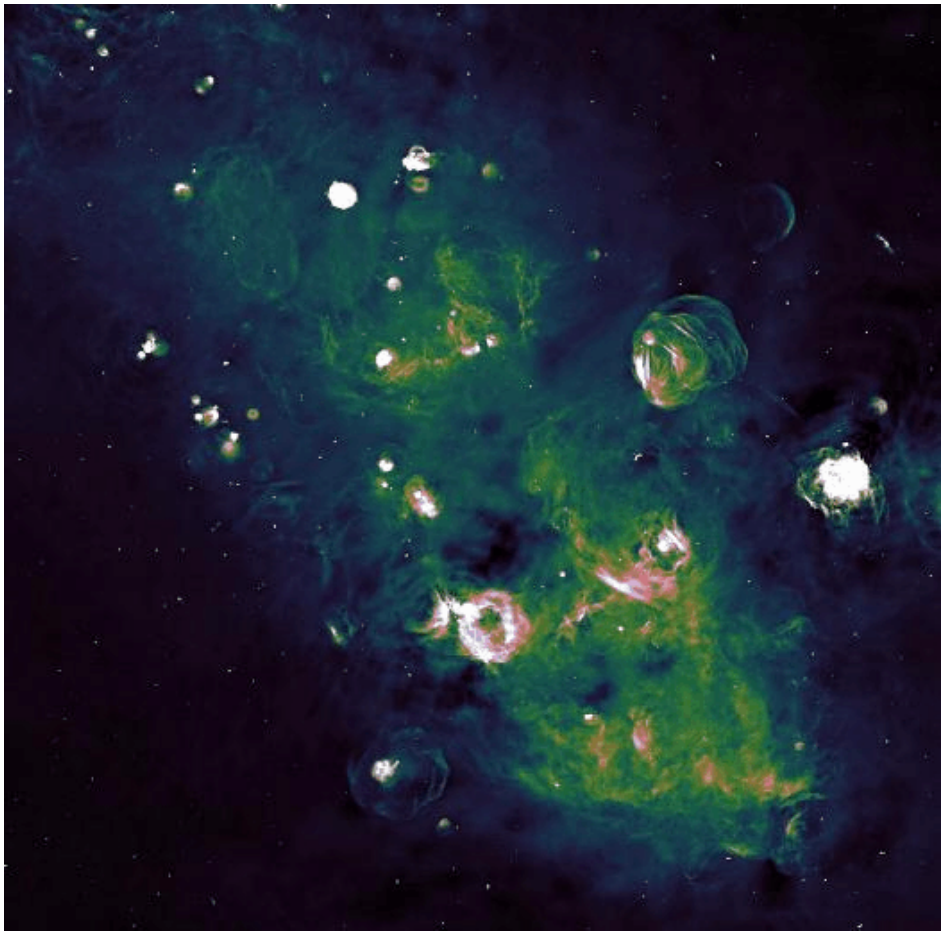
Author's extracts: *Astronomers have discovered the remains of nearly two dozen exploding stars in the Milky Way, thanks to detailed radio observations that could unveil many more such events in the Galaxy.*

Hundreds of such remnants have been found across the Milky Way, but astronomers think that they have observed only about one-fifth of the total number. Most are found by detecting radio emissions from the remnants as they expand, revealing their otherwise invisible shapes, but many are too faint to be picked up.

"There's this missing supernova-remnant problem," says Brianna Ball, who studies astronomy at the University of Alberta in Edmonton, Canada. "We know how many we should see, and we see a lot fewer than that." On 16 January, however, a project led by Ball revealed a new way to track supernova remnants down. It combined the observing power of the Australian Square Kilometre Array Pathfinder (ASKAP), a radio telescope comprising 36 antennas in Western Australia, with that of the Parkes Observatory, a single dish in New South Wales, Australia, to detect previously unseen supernova remnants in a patch of night sky.

The image the team released contains about five of the 21 newly discovered supernova remnants, including one shaped like a figure of eight, seen faintly in the top left. The picture was taken along one of the spiral arms of the Milky Way, the Norma Arm, near the dense Galactic Centre, where dust and gas heavily obscure visible light.

[Image is from this report.]



Planets.

Halliday, A.N., and R.M. Canup (2023) **The accretion of planet Earth.** NATURE REVIEWS EARTH AND ENVIRONMENT 4:doi.org/10.1038/s43017-022-00370-0

Authors' abstract: *Earth's origins are challenging to elucidate, given the lack of surviving terrestrial geology from the first 500 megayears of the Solar System. In this review, we discuss breakthroughs in geochemistry and theoretical modelling that have advanced understanding of Earth accretion.*

Theory holds that solar nebula dust particles stuck together to form pebbles, concentrations of which gravitationally collapsed into ~100-km-sized planetesimals, which in turn accreted to yield planets. Isotopic variations in meteorites indicate that pebbles formed within the first 100 kiloyears of the Solar System, planetesimals melted and differentiated within a few 100 kyr, and Mars accreted quickly within 5 Myr.

Earth's growth was more protracted, with >98% of its mass being accreted by the time of the Moon-forming Giant Impact at ~70 to 120 Myr. Earth is more enriched in s-process nuclides than chondritic meteorites, with a chemical composition affected by condensation, melting and loss.

Early volatiles acquired from the nebula largely escaped, with the remnant volatiles being diluted by main-stage Earth accretion, accompanied by loss of nitrogen to the core and/or space.

Areas for further research should include assessing mixing during large collisions and investigating the origin of very early mantle isotopic heterogeneities, which might indicate mass transfer from core to mantle over time.

Most lunar origin models fail to provide a natural explanation for the identical isotopic composition of the bulk silicate Earth and Moon for non-volatile elements.

This isotopic match is particularly problematic for tungsten, which is sensitive to the nature and timing of core formation and is unlikely to result from the Giant Impact unless there was post-impact mixing and isotopic equilibration between the silicate Earth and Moon.

The Origin Of Life.

Perovic, Slobodan (2023) **Prebiotic decluttering: the thermodynamic tail-wind to asymmetric autocatalysis.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 22:doi.org/10.1017/S1473550422000295 (available as a free pdf)

[Paleobiologists generally agree that a wide variety of self-sustaining chemical reactions occurred once Earth cooled off. Most of those reactions faded away, a process known as decluttering. Eventually a few reactions developed into what we call life, fixed into tracks which favoured asymmetric reactions that still exist in our cells.]

[An organic molecule can have the exact same chemical formula and bonds between atoms but in two mirror images of each other, known as chirality. However, for reasons not fully understood, many sugars, amino acids, nucleic acids, and enzymes are found only in either a right-handed or left-handed form, depending on which way they twist.]

Author's abstract: *I outline a general thermodynamic condition for the earliest steps in the origin of life based on fluctuation theorems developed in the last two decades. I argue that the exponentially developing loop of asymmetric autocatalysis and thermodynamic tail-wind condition (TTC) in the prebiotic clutter was a key to a particular trajectory of decluttering via a sequence of early symmetry breaking events.*

Such decluttering was bound to result, most prominently, in homochiral amino acids and homochiral sugars composing nucleotides as the TTC exponentially favoured asymmetric autocatalytic processes over catalytic and symmetric autocatalytic processes in the clutter.

What came out of the clutter were the complexes of amino-acids and sugars that formed nucleotides. The clutter also harboured preconditions for speeding up the replication of prebiotic molecular complexes through various forms of catalysis and autocatalysis.

One basic universal property common to the product of decluttering and all life is the homochirality of amino acids and D-sugars comprising the nucleotides of living systems, while asymmetric autocatalysis was an early process behind it.

Because it was a universal property of life very early on, homochirality is perhaps a unique tracker of abiogenetic processes. It also tracks early autocatalytic processes responsible for its emergence.

Based on a variety of evidence it is fairly clear that young Earth was rife with diverse organic compounds. A plausible assumption of the chemical complexity of the clutter presupposes a variety of interacting components, such as amino acids, hydroxy acid, sugars, ribose, phosphates, purines, pyrimidines and fatty acids.

Given this complexity, it is likely that various polymers with stereochemistry formed in the clutter, as well as supra-molecular aggregates. Ribose, phosphates, purines and pyrimidines may have combined to form substantial amounts of analogues of nucleotides and small amounts of nucleotides, which, when combined, become polymers.

Even RNA could have plausibly co-existed with similar molecules composed of closely analogous components of similar structures and chemical functions, including threose nucleic acid (TNA), peptide nuclei acid (PNA), glycerol-derived nucleic acid analogue and pyranosyl RNA.

They all harbour similar characteristics that enable replication and autocatalysis crucial to the emergence of life. Autocatalytic processes producing chiral (handed) molecules can be both symmetric and antisymmetric.

The latter type produces both kinds of chiral structures (enantiomers), whereas the former produces only homochiral (either left or right handed) ones. We say the mirror symmetry (two chiral molecular structures are mirror images of each other) of initial chiral enantiomers is preserved in the former case and broken in the latter.

*Since all life is composed of basic molecular building blocks that are homochiral, the latter seems t*o *be decisive already in the initial processes relevant to the origin of life.*

Paleobiology.

Ojakangas, G.W., et al (2023) **Stromatolite photomorphogenesis: lighting up their shape.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 22:doi.org/10.1017/S1473550422000313

[The first life forms to evolve were algae known as stromatolites, which grew in mats that piled up over time and produced columns or cones. They still exist today in a few restricted habitats such as Shark Bay, Australia. At one time they covered the world but when the first herbivorous microbes evolved, they mostly died out.]

[Note the last paragraph of this abstract.]

Authors' abstract: *Most stromatolites are built by photosynthetic organisms, for which sunlight is a driving factor. We examine stromatolite morphogenesis with modelling that incorporates the growth rate of cyanobacteria (the dominant stromatolite-builder today, and presumably through much of the past), as a function of the amount of irradiance received.*

This function is known to be nonmonotonic, with a maximum beyond which growth rate decreases. We define optimal irradiance as that which generates maximal growth, and we find fundamentally different morphologies are predicted under suboptimal and superoptimal direct irradiance.

When the direct irradiance is suboptimal, narrow widely spaced columns are predicted, with sharp apices resembling conical stromatolites. When it is superoptimal, broad, closely spaced, flattened domical forms appear. Such disparate morphologies could also occur as a result of other vector-flux-dependent growth factors (e.g. currents).

A differential equation is developed that describes the rate of change of the radius of curvature R at the apex of a growing stromatolite column, allowing simple simulations of the time evolution of R for model stromatolites.

The term photomorphism is proposed to describe the disparate morphologies that may arise due to the effects described here (and photomorphogenesis as the process). Model results appear to explain, at least qualitatively, the morphologies of a number of stromatolites.

If stromatolites are encountered on Mars, our model suggests that they are quite likely to be conical in form, owing to likely suboptimal irradiance since Mars has always received less irradiance than Earth.

Rattenborg, N.C., and G. Ungurean (2023) **The evolution and diversification of sleep.** TRENDS IN ECOLOGY AND EVOLUTION 38:doi.org/10.1016/j.tree.2022.10.004

Authors' abstract: *The evolutionary origins of sleep and its sub-states, rapid eye movement (REM) and non-REM (NREM) sleep, found in mammals and birds, remain a mystery. Although the discovery of a single type of sleep in jellyfish suggests that sleep evolved much earlier than previously thought, it is unclear when and why sleep diversified into multiple types of sleep.*

Intriguingly, multiple types of sleep have recently been found in animals ranging from non-avian reptiles to arthropods to cephalopods. Although there are similarities between these states and those found in mammals and birds, notable differences also exist.

The diversity in the way sleep is expressed confounds attempts to trace the evolution of sleep states, but also serves as a rich resource for exploring the functions of sleep.

Although there are similarities between these states and those found in mammals and birds, notable differences also exist. The diversity in the way sleep is expressed confounds attempts to trace the evolution of sleep states, but also serves as a rich resource for exploring the functions of sleep.

Giles, S., et al (2023) **A Late Devonian actinopterygian suggests high lineage survivorship across the end-Devonian mass extinction.** NATURE ECOLOGY AND EVOLUTION 7:doi.org/10.1038/s41559-022-01919-4

Authors' abstract: *Many accounts of the early history of actinopterygians (ray-finned fishes) posit that the end-Devonian mass extinction had a major influence on their evolution. Existing phylogenies suggest this episode could have acted as a bottleneck, paring the early diversity of the group to a handful of survivors.*

This picture, coupled with increases in taxonomic and morphological diversity in the Carboniferous, contributes to a model of explosive post-extinction radiation.

However, most actinopterygians from within a roughly 20-million year (Myr) window surrounding the extinction are poorly known, contributing to uncertainty about the meaning of these patterns.

Here, we report an exceptionally preserved fossil from 7 Myr before the extinction that reveals unexpected anatomical features. Palaeoneiros clackorum gen. et sp. nov. nests within a clade of post-Devonian species and, in an expanded phylogenetic analysis, draws multiple lineages of Carboniferous actinopterygians into the Devonian.

This suggests cryptic but extensive lineage diversification in the latest Devonian, followed by more conspicuous feeding and locomotor structure diversification in the Carboniferous.

Our revised model matches more complex patterns of divergence, survival and diversification around the Devonian/Carboniferous boundary in other vertebrate clades. It also fundamentally recalibrates the onset of diversification early in the history of this major radiation.

[Image is from this paper. Not a big fish, more like a minnow.]

Dowding E.M., et al (2023) **Survivorship dynamics of the flora of Devonian Angarida.** PROCEEDINGS OF THE RPYAL SOCIETY OF LONDON 289B:doi.org/10.1098/rspb.2022.1079 (available as a free pdf)

Authors' abstract: *Devonian plants in Siberia present protracted pioneer succession. Research into the survivorship dynamics of early plant communities upon the palaeocontinent Angarida have demonstrated that transgression and volcanogenic nutrient influx were key to the survival of colonizing plants.*

Taxic proportions show that migrating taxa entered Angarida from the southwest, Kuznetsk and Minusinsk basins, dispersing across the continent in waves through central areas northwards.

The patterns of dispersal are consistent throughout the Devonian. Increased nutrient load from the active pulses of the Viluy-Yakutsk Large Igneous Province, biogeomorphic ecosystem engineering and the increased biomass of Angaridan plants are assisted by Late Devonian transgression.

These cumulative factors can be linked to the Late Devonian marine extinctions observed in Siberia.

[Map is from this paper. Notice the lines of latitude. Angarida, which would become the core of Siberia, was about the same position as contiguous USA.]

Liu, F., et al (2023) **Dying in the Sun: Direct evidence for elevated UV-B radiation at the end-Permian mass extinction.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.abo6102 (available as a free pdf)

[The end-Permian extinction 251 megayears ago was the greatest mass extinction on Earth, when 97% of species died out from mass vulcanism as the supercontinent Pangea began to break apart.]

Authors' abstract: *Land plants can adjust the concentration of protective ultraviolet B (UV-B)-absorbing compounds (UACs) in the outer wall of their reproductive propagules in response to ambient UV-B flux.*

To infer changes in UV-B radiation flux at Earth's surface during the end-Permian mass extinction, we analyze UAC abundances in ca. 800 pollen grains from an independently dated Permian-Triassic boundary section in Tibet.

Our data reveal an excursion in UACs that coincide with a spike in mercury concentration and a negative carbon-isotope excursion in the latest Permian deposits, suggesting a close temporal link between large-scale volcanic eruptions, global carbon, and mercury cycle perturbations, and ozone layer disruption.

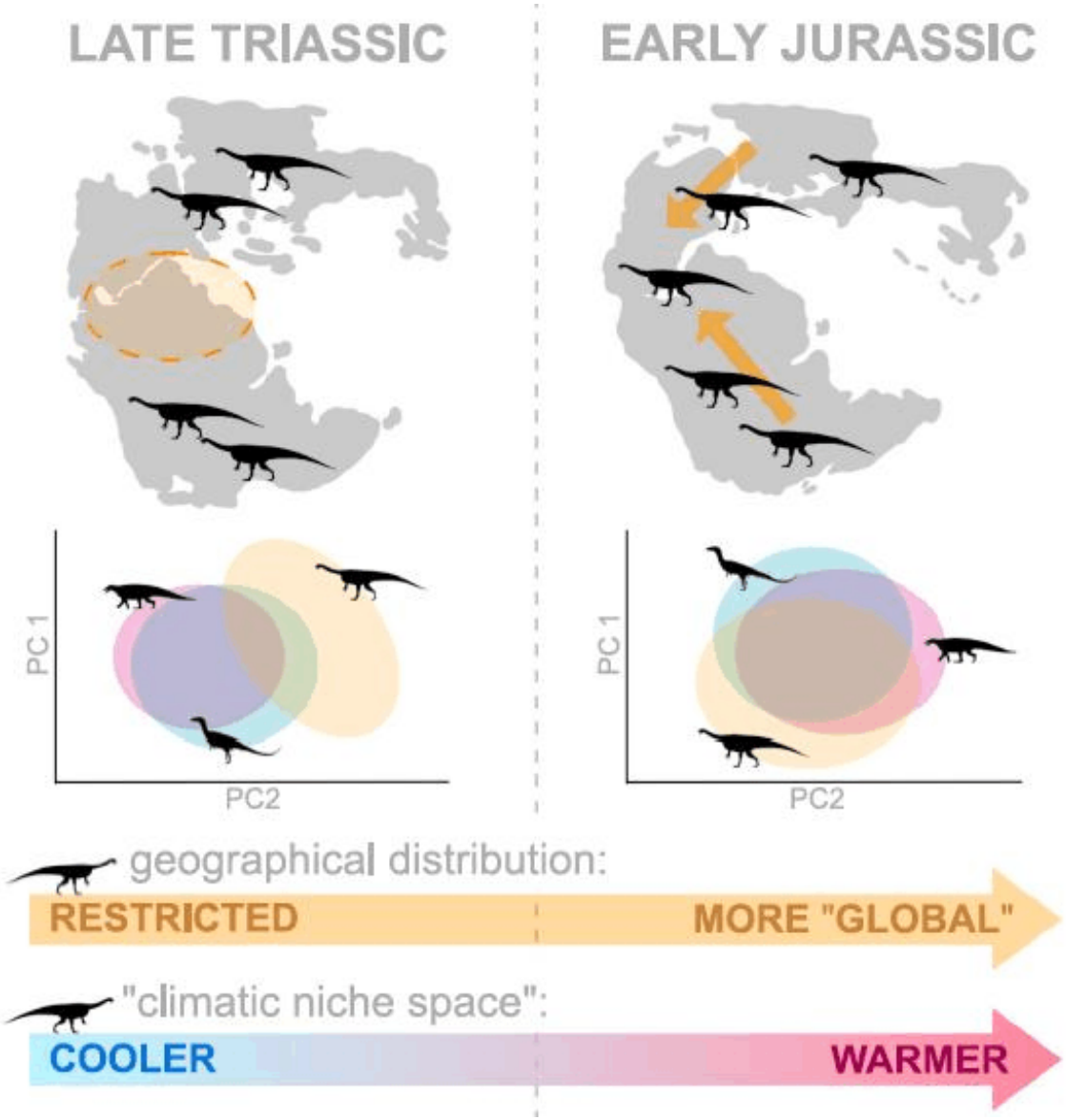
Because enhanced UV-B radiation can exacerbate the environmental deterioration induced by massive magmatism, ozone depletion is considered a compelling ecological driver for the terrestrial mass extinction.

[Map is from this paper and shows Earth as it was during the end-Permian extinction. One reason for so many species dying was that they were concentrated on or around a single supercontinent instead of being dispersed across the planet as are today's continents.]

Dinosaurs.

Dunne, E.M., et al (2023) **Climatic controls on the ecological ascendancy of dinosaurs.** CURRENT BIOLOGY 33:doi.org/10.1016/j.cub.2022.11.064 (available as a free pdf)

Authors' abstract: *The ascendancy of dinosaurs to become dominant components of terrestrial ecosystemswas a pivotal event in the history of life, yet the drivers of their early evolution and biodiversity are poorly understood.*



During their early diversification in the Late Triassic, dinosaurs were initially rare and geographically restricted, only attaining wider distributions and greater abundance following the end-Triassic mass extinction event.

This pattern is consistent with an opportunistic expansion model, initiated by the extinction of co-occurring groups such as aetosaurs, rauisuchians, and therapsids.

However, this pattern could instead be a response to changes in global climatic distributions through the Triassic to Jurassic transition, especially given the increasing evidence that climate played a key role in constraining Triassic dinosaur distributions.

Here, we test this hypothesis and elucidate how climate influenced early dinosaur distribution by quantitatively examining changes in dinosaur and tetrapod ''climatic niche space'' across the Triassic-Jurassic boundary.

Statistical analyses show that Late Triassic sauropodomorph dinosaurs occupied a more restricted climatic niche space than other tetrapods and dinosaurs, being excluded from the hottest, low-latitude climate zones.

A subsequent, earliest Jurassic expansion of sauropodomorph geographic distribution is linked to the expansion of their preferred climatic conditions. Evolutionary model-fitting analyses provide evidence for an important evolutionary shift from cooler to warmer climatic niches during the origin of Sauropoda.

These results are consistent with the hypothesis that global abundance of sauropodomorph dinosaurs was facilitated by climatic change and provide support for the key role of climate in the ascendancy of dinosaurs.

[Map is from this paper.]

Kalyniuk, J.E., et al (2023) **The Albian vegetation of central Alberta as a food source for the nodosaurid *Borealopelta markmitchelli*.** PALAEOGEOGRAPHY, PALAEOCLIMATOLOGY, PALAEOECOLOGY 611:doi.org/10.1016/j.palaeo.2022.111356 (available as a free pdf)

Authors' abstract: *During the Cretaceous, large herbivorous dinosaurs (megaherbivores) acted as keystone species, just as large mammals do today (e.g., elephants), yet despite their significance in Cretaceous ecosystems, what plant taxa these dinosaurs ate is unclear.*

The Albian armoured dinosaur Borealopelta markmitchelli (Ornithischia; Nodosauridae) was discovered in northern Alberta, Canada, and has well-preserved stomach contents dominated by fern leaf tissues, with low amounts of gymnosperm material, implying selective feeding.

The lower Albian Gates Formation (Grande Cache Member) macroflora of central Alberta is contemporaneous and spatially proximal with B. markmitchelli and therefore provides information on local vegetation available to this nodosaurid and other megaherbivores in this area.

In this study we provide census-sampled abundance data for the Gates Formation macroflora. These data also provide the means to further investigate the feeding ecology of Borealopelta by summarizing the vegetation and local food options available.

Census collections at five sites within the Grande Cache Member exposed in the Grande Cache Coal Mine reveal that the local vegetation there was dominated by conifers (44–70%) across all sites.

Athrotaxites, Elatides, and Pityocladus were the most common conifers. Other gymnosperms present were ginkgophytes (e.g., Ginkgoites; 11%) and Taeniopteris (9%). Caytoniales (Sagenopteris) were found at one study site but uncommon (2%).

Ferns (e.g., Cladophlebis, Coniopteris, Gleichenites) accounted for 14% of the total site counts while cycadophytes (Bennettitales; 4%) and Equisetites (1%) were less common. When comparing the Gates Formation macroflora to the stomach contents of Borealopelta, these data suggest that B. markmitchelli was selectively feeding on ferns, or in a recently disturbed fern-dense area within the local landscape.

Environmental Science.

Kehlmaier, C., et al (2023) **Ancient DNA elucidates the lost world of western Indian Ocean giant tortoises and reveals a new extinct species from Madagascar.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.abq2574 (available as a free pdf)

Authors' abstract: *Before humans arrived, giant tortoises occurred on many western Indian Ocean islands. We combined ancient DNA, phylogenetic, ancestral range, and molecular clock analyses with radiocarbon and paleogeographic evidence to decipher their diversity and biogeography.*

Using a mitogenomic time tree, we propose that the ancestor of the extinct Mascarene tortoises spread from Africa in the Eocene to now-sunken islands northeast of Madagascar. From these islands, the Mascarenes were repeatedly colonized.

Another out-of-Africa dispersal (latest Eocene/Oligocene) produced on Madagascar giant, large, and small tortoise species. Two giant and one large species disappeared circa 1,000 to 600 years ago, the latter described here as new to science using nuclear and mitochondrial DNA.

From Madagascar, the Granitic Seychelles were colonized (Early Pliocene) and from there, repeatedly Aldabra (Late Pleistocene). The Granitic Seychelles populations were eradicated and later reintroduced from Aldabra.

Chiba, M., et al (2023) **The mutual history of Schlegel's Japanese gecko Reptilia: Squamata: Gekkonidae and humans inscribed in genes and ancient literature.** PNAS NEXUS 1:doi.org/10.1093/pnasnexus/pgac245 (available as a free pdf)

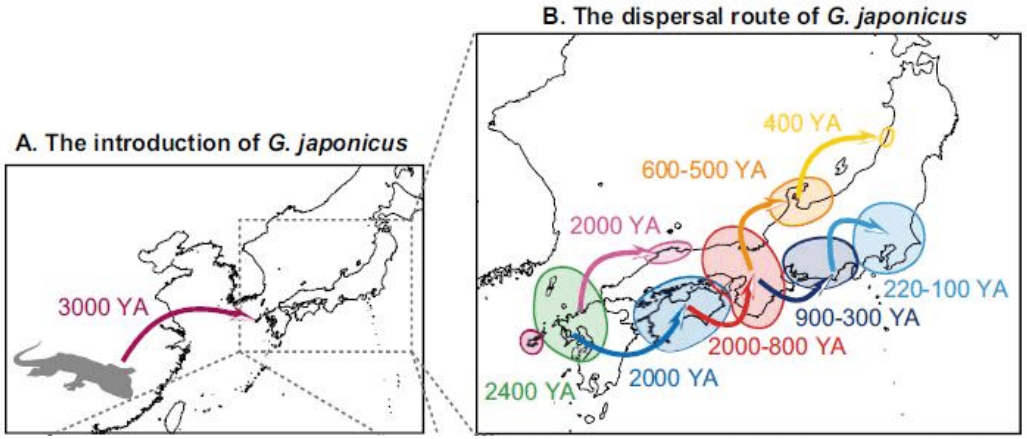
Authors' abstract: *We hypothesized that ancient urban development and transitions had a non-negligible effect on species distribution. Inferring the impact of past human activity on ecosystems from ancient literature and verifying that impact by genetic analysis and human history is an effectivemeans of tackling this problem.*

As geckos, a popular neighbor of human dwellings, are good material for this model, we performed this combination approach using Schlegel's Japanese

gecko, Gekko japonicus. We show that G. japonicus migrated from China to the western Japanese archipelago before Christ.

The gecko species dispersed itself from western to eastern the archipelago on a time scale of thousands of years. There are many synchronizations between the dispersal history of G. japonicus and the historical development of human society. It is suggested by such synchronizations that humans have influenced the distribution of G. japonicus many times throughout its dispersal history.

[Maps are from this paper.]



DeLong, J.P., et al (2023) **The consumption of viruses returns energy to food chains.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 120:doi.org/10.1073/pnas.2215000120 (available as a free pdf)

Authors' abstract: *Here, we show that small protists not only can consume viruses they also can grow and divide given only viruses to eat.*

Moreover, the ciliate Halteria sp. foraging on chloroviruses displays dynamics and interaction parameters that are similar to other microbial trophic interactions. These results suggest that the effect of viruses on ecosystems extends beyond (and in contrast to) the viral shunt by redirecting energy up food chains.

Many foragers that swallow water, soil particles, or leaves routinely ingest virus particles. Given the small mass of virus particles relative to other foods, the consumption of viruses is thought to be calorically unimportant and not of sufficient magnitude to influence ecosystem processes.

Nonetheless, viruses contain amino acids, nucleic acids, and lipids, and if consumed in sufficient quantities could influence the population dynamics of the species that consume them.

Botany.

de Lima Cruz, G.F., et al (2023) **Carcass traits and meat quality of goats fed with cactus pear (*Opuntia ficus-indica* Mill) silage subjected to an intermittent water supply.** SCIENTIFIC REPORTS 13:doi.org/10.1038/s41598-022-25923-7 (available as a free pdf)

Authors' abstract: *The effect of different proportions of cactus pear (Opuntia ficus-indica Mill) silage (CPS) and intermittent water supply (IWS) to crossbreed goats' diets on carcass traits and meat quality were evaluated.*

The IWS caused a reduction in the percentage of leg fat in the animals. The rib eye area, carcass weight, and physical-chemical characteristics were not affected by the CPS or IWS.

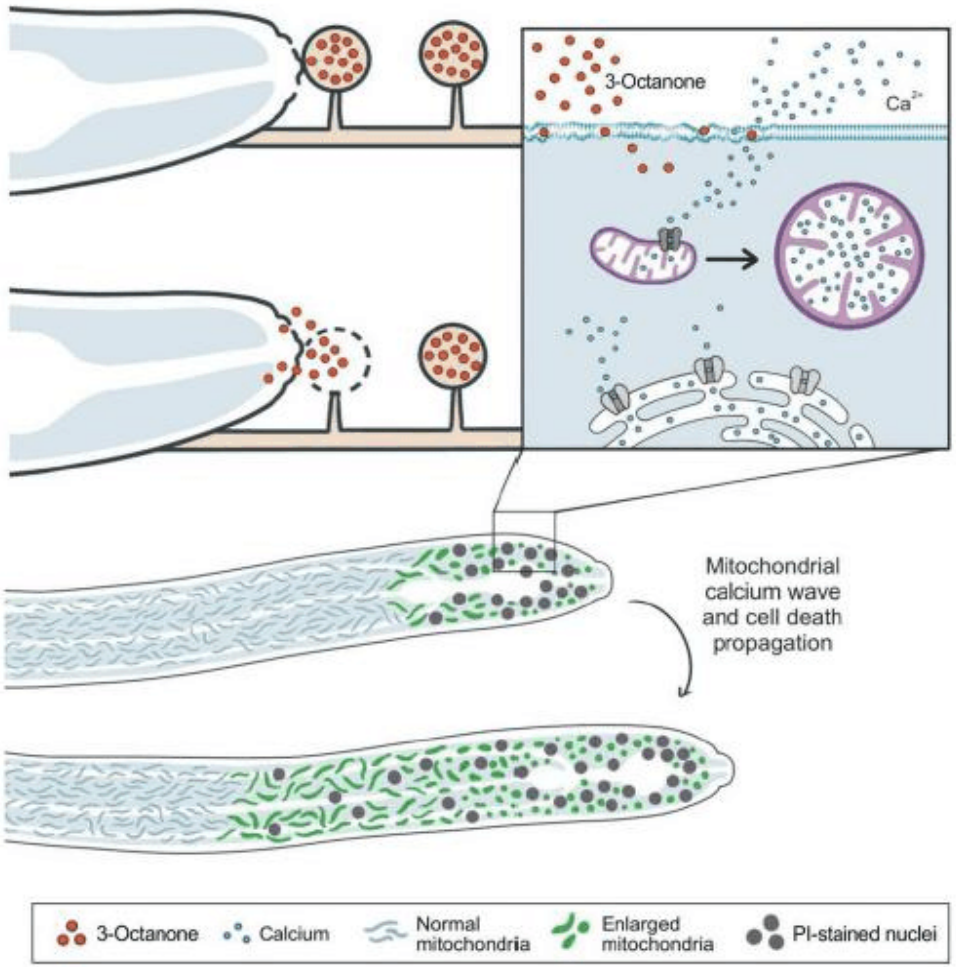
Therefore, in situations of water scarcity, an intermittent water supply of up to 48 hours and diets with up to 42% cactus pear silage, can be adopted in goat feedlot, without affecting carcass traits and meat quality.

Speirs: We never had goats back on the ranch, and for that matter opuntias are not found in west-central Alberta where I grew up. However *Opuntia polyacantha* and *Opuntia fragilis* grow in southern Alberta. I have patches of both in my garden.

Lee, C.H., et al (2023) **A carnivorous mushroom paralyzes and kills nematodes via a volatile ketone.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.ade4809 (available as a free pdf)

Authors' abstract: *The carnivorous mushroom Pleurotus ostreatus uses an unknown toxin to rapidly paralyze and kill nematode prey upon contact. We report that small lollipop-shaped structures (toxocysts) on fungal hyphae are nematicidal and that a volatile ketone, 3-octanone, is detected in these fragile toxocysts.*

Treatment of Caenorhabditis elegans with 3-octanone recapitulates the rapid paralysis, calcium influx, and neuronal cell death arising from fungal contact. Moreover, 3-octanone disrupts cell membrane integrity, resulting in extracellular calcium influx into cytosol and mitochondria, propagating cell death throughout the entire organism.



Last, we demonstrate that structurally related compounds are also biotoxic to C. elegans, with the length of the ketone carbon chain being crucial. Our work reveals that the oyster mushroom has evolved a specialized structure containing a volatile ketone to disrupt the cell membrane integrity of its prey, leading to rapid cell and organismal death in nematodes.

[Images are from this paper.]

Human Prehistory.

Hoffecker, J.F., et al (2023) **Beringia and the peopling of the Western Hemisphere.** PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON 290B:doi.org/10.1098/rspb.2022.2246 (available as a free pdf)

Authors' abstract: *Did Beringian environments represent an ecological barrier to humans until less than 15,000 years ago or was access to the Americas controlled by the spatial-temporal distribution of North American ice sheets?*

Beringian environments varied with respect to climate and biota, especially in the two major areas of exposed continental shelf.

The East Siberian Arctic Shelf ('Great Arctic Plain' (GAP)) supported a dry steppe-tundra biome inhabited by a diverse large-mammal community, while the southern Bering-Chukchi Platform ('Bering Land Bridge' (BLB)) supported mesic tundra and probably a lower large-mammal biomass.

A human population with west Eurasian roots occupied the GAP before the Last Glacial Maximum (LGM) and may have accessed mid-latitude North America via an interior ice-free corridor.

Reopening of the corridor less than 14,000 years ago indicates that the primary ancestors of living First Peoples, who already had spread widely in the Americas at this time, probably dispersed from the northwest Pacific coast.

A genetic 'arctic signal' in non-arctic First Peoples suggests that their parent population inhabited the GAP during the LGM, before their split from the former. We infer a shift from GAP terrestrial to a subarctic maritime economy on the southern BLB coast before dispersal in the Americas from the northwest Pacific coast.

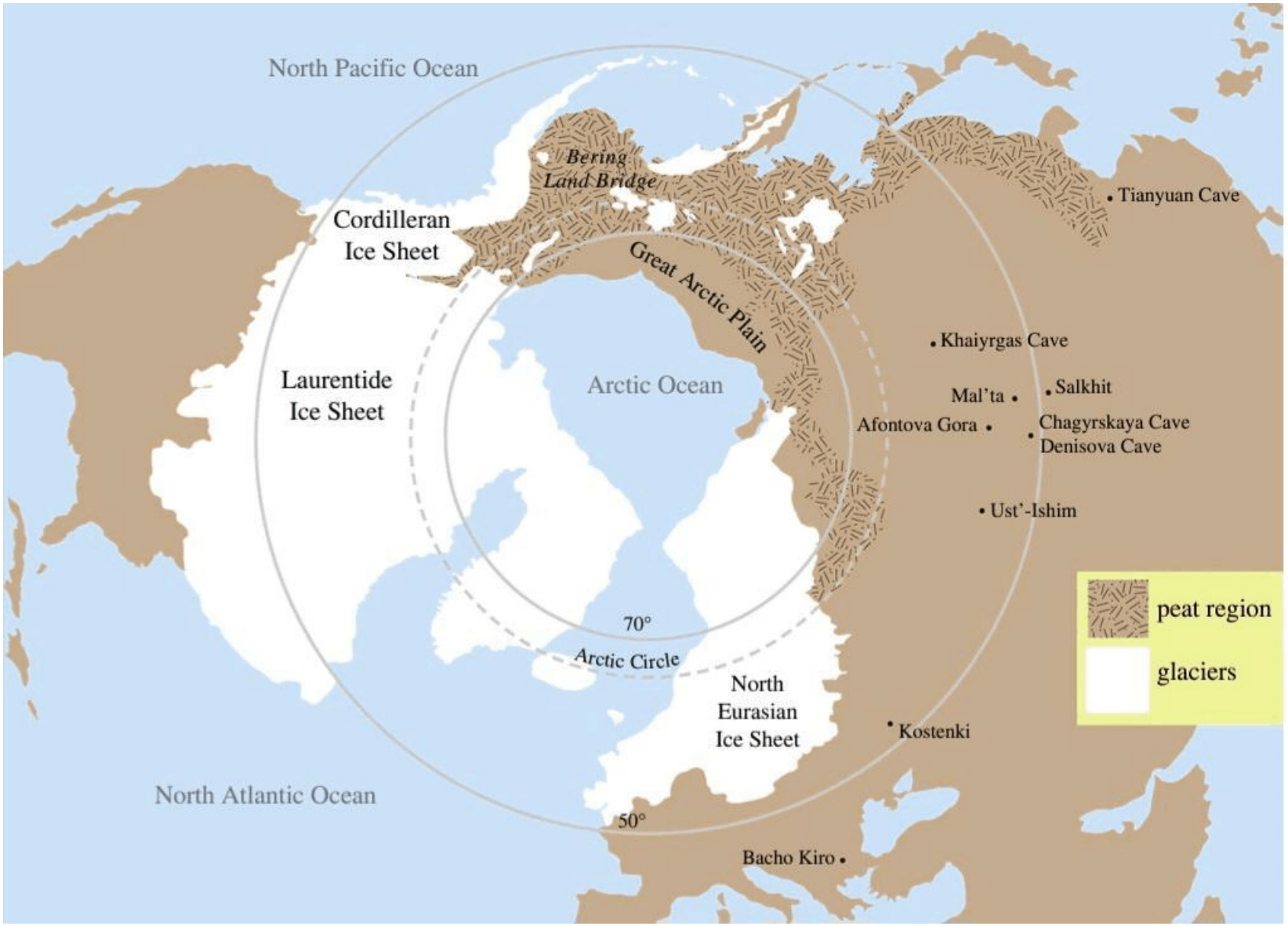
The Neanderthals inhabited southwest Europe (including during glacial periods) where climates generally are mild and plant and animal productivity are relatively high, but their spatial/temporal distribution in eastern Europe and northern Asia, where climates are more continental and biological productivity lower, was limited.

The Denisovans are found only in Asia. Both taxa were present in southwest Siberia (Altai Mountains) during the earlier Late Pleistocene. They appear to have been confined largely to places where natural shelters and wood were available.

Modern humans were present, at least on a seasonal basis, in the European Arctic before 40 ka and probably on a year-round basis in arctic Siberia and Beringia by 33 kiloyears ago. The basal Eurasian lineages reflect significant genetic admixture from local Neanderthal/Denisovan populations.

Despite the genomic contribution from the local Neanderthal population, modern humans in northern Eurasia seem to have acquired few if any of the evolved anatomical adaptations to cold climate of the former.

While only fragmentary skeletal remains have been recovered from time periods before 40 kiloyears ago, complete skeletons from later periods before the LGM indicate retention of warm-climate anatomy (e.g. high brachial index) from lower latitudes, which would have rendered them susceptible to hypothermia and cold injury.



Modern humans were an invasive species in northern Eurasia, hampered by an anatomical pattern better suited to the tropics.

They nevertheless drove the local Neanderthal and Denisovan populations to extinction within a few thousand years, and occupied habitats and climate zones beyond the range of their predecessors.

The explanation for this phenomenon lies in the fact that modern humans, including the basal

Eurasian lineages, were equipped with most of the technologies found among recent hunter-gatherers in high latitudes.

Mechanical projectile weaponry is inferred from the morphometrics of Levallois points in the IUP and indicated by diagnostic impact fractures in southwest Europe approximately 45 kiloyears ago.

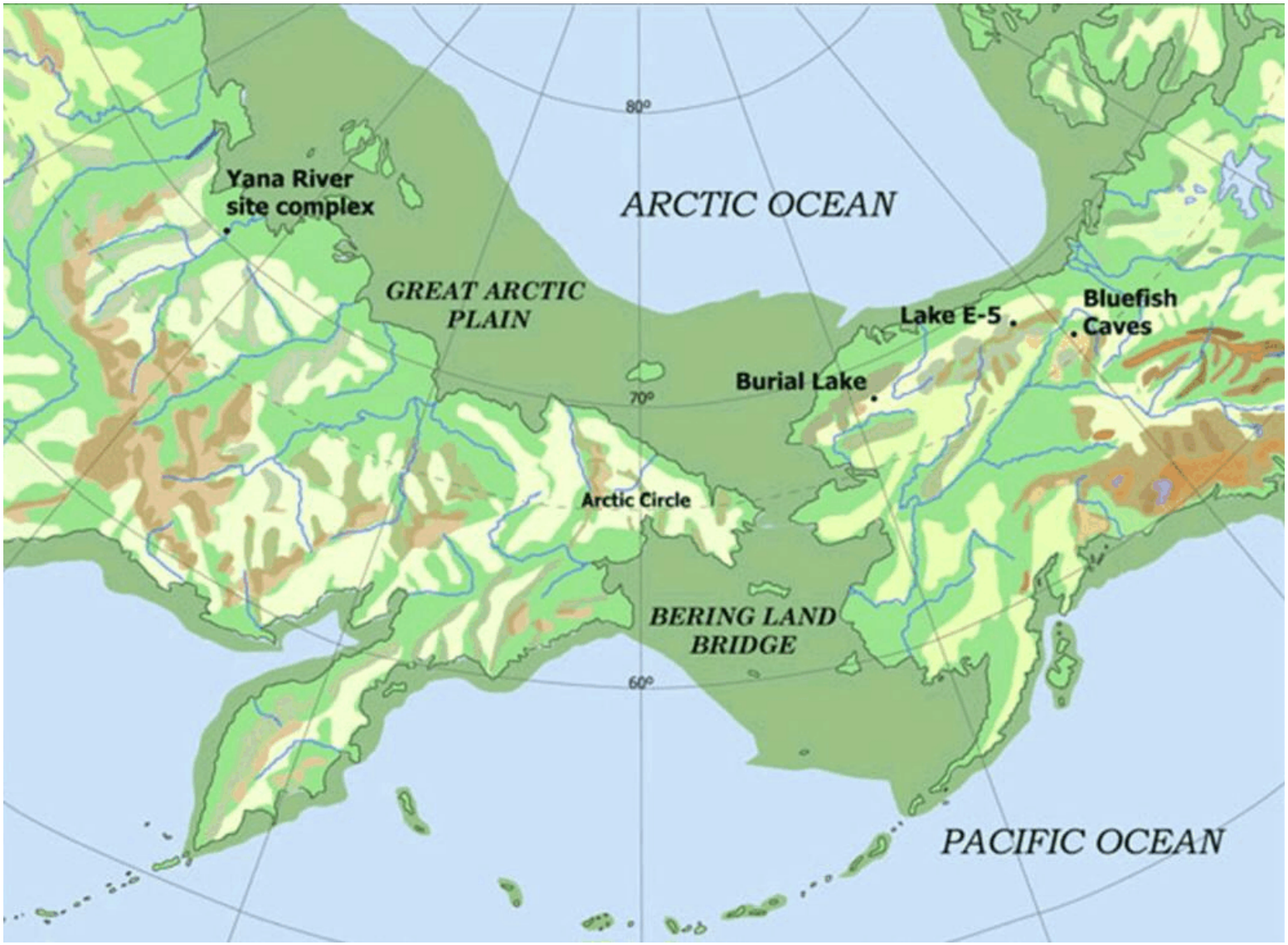
Indirect evidence for snaring/trapping small mammals is reported from the East European Plain greater than 40 kiloyears, while traces of mechanical rotary drills (which suggest fire-making technology) are found in both Eastern Europe (Kostenki) and southwest Siberia (Denisova Cave) in this time range.

Evidence for sewn clothing (eyed needles) is dated to approximately 45 kiloyears in the IUP level at Denisova Cave. Reliable traces of artificial shelters date to 32 ka at the latest.

Equipped with these technologies, which appear to have been absent among Neanderthals and Denisovans, modern humans increased their foraging efficiency and success rate and harvested resources unavailable to the former in north Eurasian habitats where plant and animal productivity was low (especially during cold-climate periods).

With tailored insulated clothing, artificial shelters, fire-making devices, and alternative fuels (e.g. fresh bone), they not only survived extreme winter temperatures, but foraged effectively in cold weather and expanded their range into areas devoid of natural shelters and adequate wood fuel.

[Maps are from this paper.]



Bacon, B., et al (2022) **An Upper Palaeolithic proto-writing system and phenological calendar.** CAMBRIDGE ARCHAEOLOGICAL JOURNAL 33:doi.org/10.1017/S0959774322000415 (available as a free pdf)

Authors' abstract: *In at least 400 European caves such as Lascaux, Chauvet and Altamira, Upper Palaeolithic Homo sapiens groups drew, painted and engraved non-figurative signs from at least ~42,000 BP and figurative images (notably animals) from at least 37,000 BP.*

Since their discovery ~150 years ago, the purpose or meaning of European Upper Palaeolithic non-figurative signs has eluded researchers. Despite this, specialists assume that they were notational in some way.

Using a database of images spanning the European Upper Palaeolithic, we suggest how three of the most frequently occurring signs, the line <\|>, the dot <•>, and the <Y>, functioned as units of communication.

We demonstrate that when found in close association with images of animals the line <\|> and dot <•> constitute numbers denoting months, and form constituent parts of a local phenological/meteorological calendar beginning in spring and recording time from this point in lunar months.

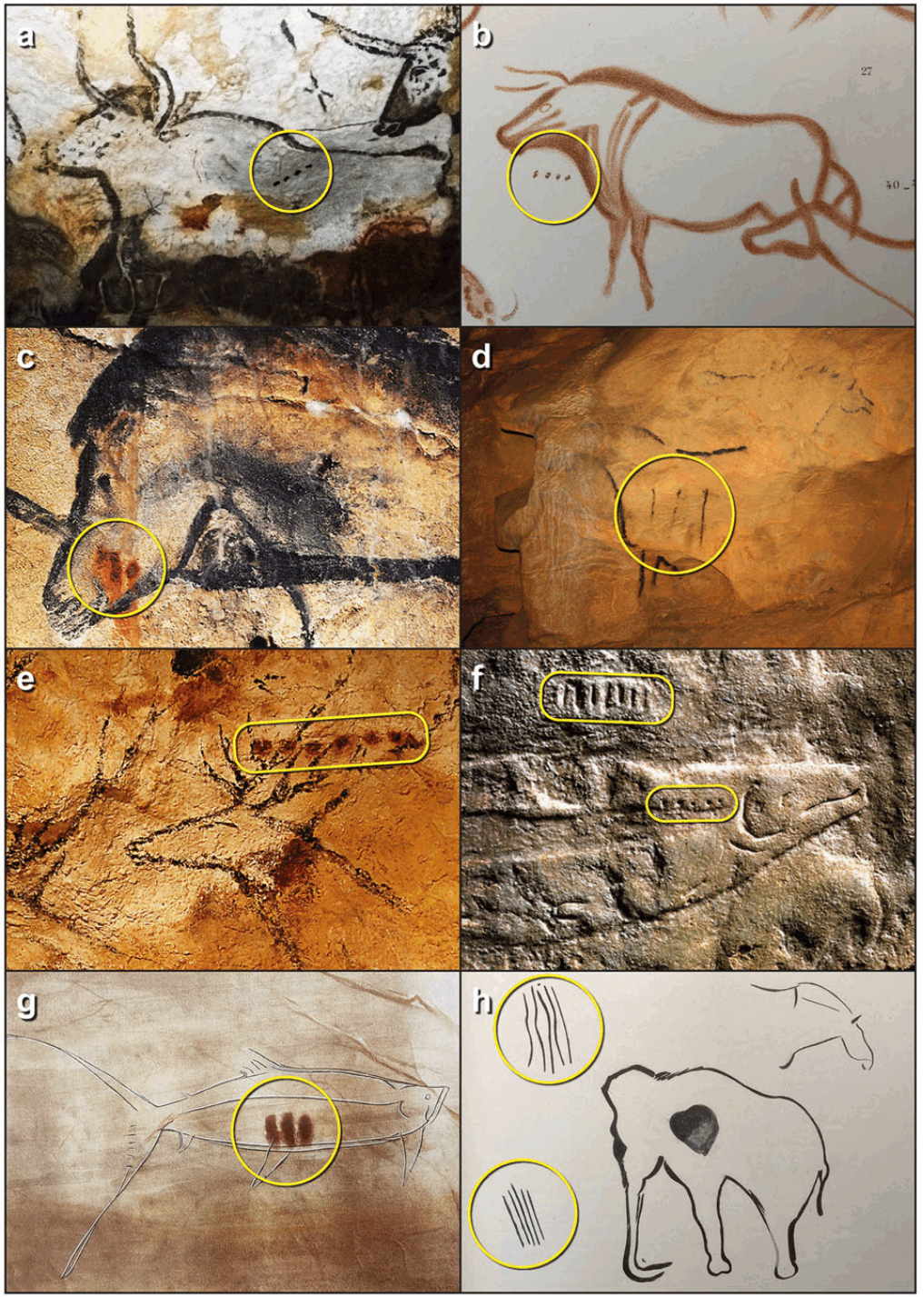
We also demonstrate that the <Y> sign, one of the most frequently occurring signs in Palaeolithic non-figurative art, has the meaning "to give birth". The position of the <Y> within a sequence of marks denotes month of parturition, an ordinal representation of number in contrast to the cardinal representation used in tallies.

Our data indicate that the purpose of this system of associating animals with calendar information was to record and convey seasonal behavioural information about specific prey taxa in the geographical regions of concern.

We suggest a specific way in which the pairing of numbers with animal subjects constituted a complete unit of meaning, a notational system combined with its subject, that provides us with a specific insight into what one set of notational marks means.

It gives us our first specific reading of European Upper Palaeolithic communication, the first known writing in the history of Homo sapiens.

[Images are from this paper. The dots and lines indicating the month counts are circled in the photos.]



Sprajc, I., et al (2023) **Origins of Mesoamerican astronomy and calendar: Evidence from the Olmec and Maya regions.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.abq7675 (available as a free pdf)

Authors' abstract: *Archaeoastronomical studies have demonstrated that the important civic and ceremonial buildings in Mesoamerica were largely oriented to sunrises or sunsets on specific dates, but the origin and spread of orientation practices were not clear.*

Using aerial laser scanning (lidar) data, we analyzed orientations of a large number of ceremonial complexes in the area along the southern Gulf Coast, including many recently identified Formative sites dating to 1100 BCE to 250 CE.

The distribution pattern of dates marked by solar alignments indicates their subsistence-related ritual significance. The orientations of complexes built between 1100 and 750 BCE, in particular, represent the earliest evidence of the use of the 260-day calendar, centuries earlier than its previously known use in textual records.

Modern Humans.

Seymour, L.M., et al (2023) **Hot mixing: Mechanistic insights into the durability of ancient Roman concrete.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.add1602 (available as a free pdf)

Authors' abstract: *Ancient Roman concretes have survived millennia, but mechanistic insights into their durability remain an enigma. Here, we use a multiscale correlative elemental and chemical mapping approach to investigating relict lime clasts, a ubiquitous and conspicuous mineral component associated with ancient Roman mortars.*

Together, these analyses provide new insights into mortar preparation methodologies and provide evidence that the Romans employed hot mixing, using quicklime in conjunction with, or instead of, slaked lime, to create an environment where high surface area aggregate-scale lime clasts are retained within the mortar matrix.

Inspired by these findings, we propose that these macroscopic inclusions might serve as critical sources of reactive calcium for long-term pore and crack-filling or post-pozzolanic reactivity within the cementitious constructs.

The subsequent development and testing of modern lime clast-containing cementitious mixtures demonstrate their self-healing potential, thus paving the way for the development of more durable, resilient, and sustainable concrete formulations.

Cilliers, J., et al (2023) **Did it pay to be a pioneer? Wealth accumulation in a newly settled frontier society.** ECONOMIC HISTORY REVIEW 76:doi.org/10.1111/ehr.13188 (available as a free pdf)

Authors' abstract: *European settler colonies are often thought to have been characterised by a continued expansion of the landed frontier, which impacted the distribution of wealth across their settler populations.*

Hampered by a lack of data, few studies have been able to study this in depth. How does settlement timing affect wealth and wealth accumulation when frontier expansion is not a smooth, continuous process?

Was it the case that pioneers reaped greater economic benefits from locating their farms on superior land, or would they be disadvantaged compared with later arrivals owing to limited infrastructure or greater risk of conflict with indigenous populations?

In this paper, we use a unique dataset that allows us to analyse the link between time of arrival and wealth accumulation in a colonial agrarian frontier society: the Graaff-Reinet district in South Africa's Cape Colony between 1786 and 1850.

We find that those who arrived early located their farms in the more climatologically suitable areas of the district and utilised their superior lands to accumulate wealth more quickly than latecomers.

However, owing to institutional changes that favoured later British arrivals, we also show that the existence of an early-arrival premium did not mean persistence in land ownership.

Speirs: This paper caught my eye because I am a pure-laine descendant of homesteaders on both sides of my family. My father's family homesteaded in southern Saskatchewan in 1912, at that time going through an abnormally moist climatic cycle. They suffered through the Dirty Thirties when the land dried up and blew away.

My mother's family homesteaded in west-central Alberta in 1903, which has never had extended drought. The Great Depression was hard on them but at least they never had crop failure. Their relative success compared to my father's family was because of better climate.

Tunçgenç, B., et al (2023) **Social bonds are related to health behaviors and positive well-being globally.** SCIENCE ADVANCES 9:doi.org/10.1126/sciadv.add3715 (available as a free pdf)

Authors' abstract: *At times of turmoil, such as during disasters, social crises, or pandemics, our social bonds can be key to receiving support and gaining certainty about the right course of action.*

In an analysis combining two global data sets (N = 13,264) collected during the first wave of the COVID-19 pandemic, this study examined how social bonds with close social circles (i.e., family and friends) and extended groups (i.e., country, government, and humanity) relate to engagement in health behaviors and psychological well-being.

Results revealed that only family bonding was associated with self-reported engagement in health behaviors. Being strongly bonded with both close circles and extended groups predicted less anxiety and depression and better well-being, particularly for those who were bonded with more groups.

These findings highlight that close and extended social bonds offer different sources of support and direction during the most challenging of circumstances and that continuous investment is needed to forge and maintain both.

FREE STUFF ONLINE

You will have noticed that I provide sources for the pdfs and mp3s reviewed in this zine. Here is a summary of some good resources, all of which are free.

In particular, the "Seen In The Literature" column cites only peer-reviewed papers. For topics such as climate change or social media effects, more people should be reading these papers instead of blogs where commentators confuse their opinions as being facts.

For scientific papers for which free pdfs are available, the easiest method is to Google either the title of the paper or its digital object identifier, the phrase beginning with doi.org.

Most papers are behind a paywall, so unless you have access to a university library computer, you can only get the abstract. However, the abstract is often enough to understand the gist of the article.

Every scientific periodical has free email notifications of each new issue's table of contents. I subscribe to dozens of notification services, in case you were wondering how I manage to keep up with the literature.

For zines, www.efanzines.com provides current pdf zines as well as some older ones. A science fiction club called Fanac at www.fanac.org does the reverse; they provide thousands of old zines from the 1930s to date, with a few current zines. Both sites have a free email notification service you can subscribe to.

The Old Time Radio Researchers have thousands of old-time radio shows (1930s to 1950s) covering all the genres, such as comedy, science fiction, fantasy, and mystery. Visit www.otrr.org/OTRRLibrary.

They also publish a free bulletin OLD RADIO TIMES, available at www.otrr.org/?c=times, with an email notification service. Don't pay money for audio books and listen to a droning voice when you can listen for free to full-cast shows such as Jack Benny or Inner Sanctum from the OTRR.

For pulp fiction magazines from all genres, visit www.archive.org/details/pulpmagazinearchive?&sort=-downloads&page=2
Books in the public domain are free from www.gutenberg.org