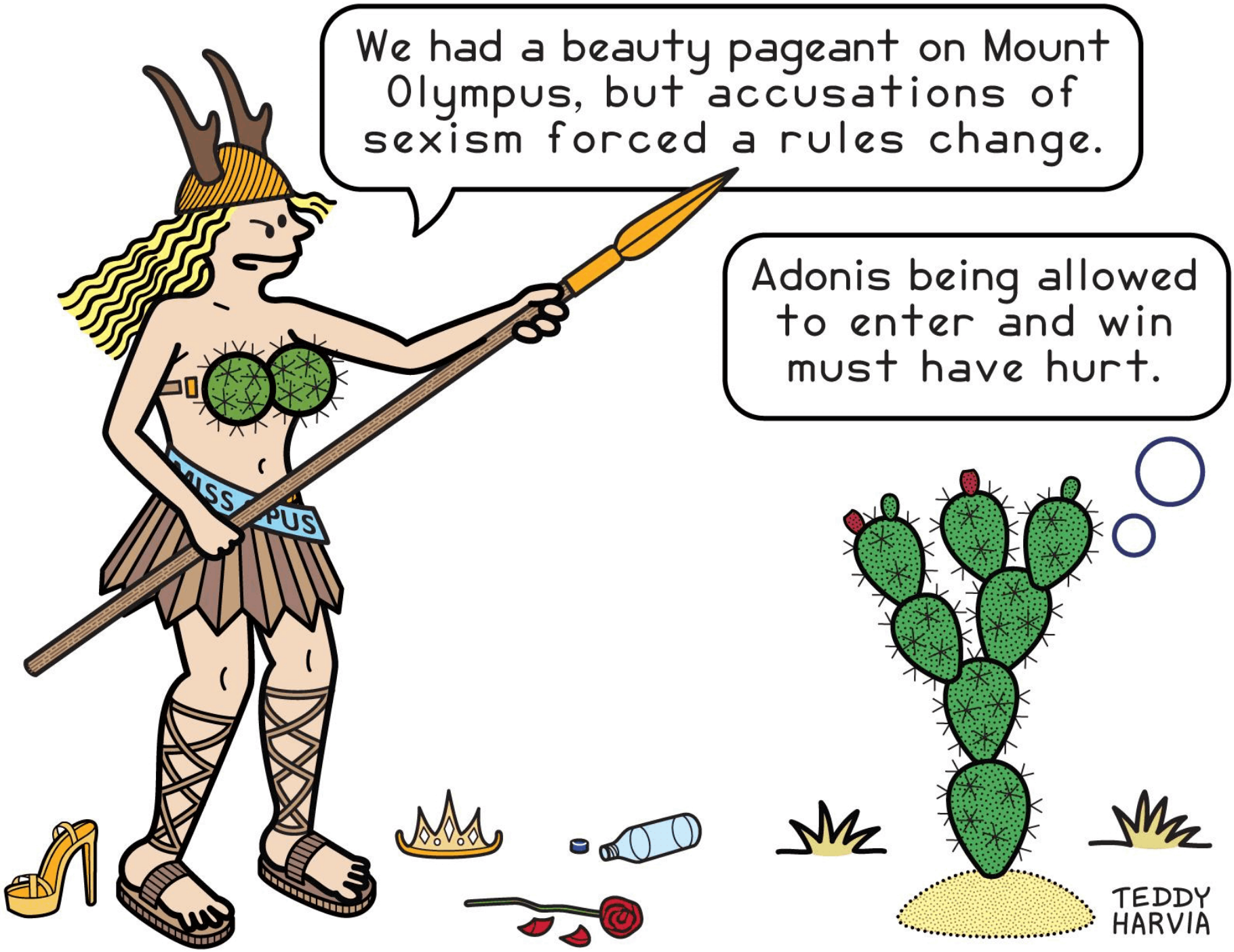
OPUNTIA 578


We had a beauty pageant on Mount Olympus, but accusations of sexism forced a rules change.
Adonis being allowed to enter and win must have hurt.
TEDDY HARVIA

Opuntia is published by Dale Speirs, Calgary, Alberta. It is posted on www.efanzines.com and www.fanac.org. There is also an cumulative subject index to all issues available at those sites. My e-mail address is: opuntia57@hotmail.com When sending me an emailed letter of comment, please include your name and town in the message.

AROUND COWTOWN

photos by Dale Speirs

After the Calgary Stampede rodeo concluded on July 14, the city continued to enjoy hot sunny days, with temperatures in the 30º to 35ºC range. That boosted the rodeo to a new attendance record because it is mainly an outdoor show.

The previous record was set in 2012, the centennial year of the Stampede, when 1,409,371 visitors entered for the big celebration. The Stampede never bested that record until this year when 1,477,953 people entered.

The hot sunny weather continued the following fortnight, which was good news for the festival season. Beginning the weekend after Stampede, there is a continual sequence of ethnic and street festivals around the city. There's always something to do in Cowtown.

First off the mark was Fiestaval Latino at the Olympic Plaza downtown, held on the first weekend after Stampede. This was sponsored by a coalition of Hispanic and Brazilian groups.

I admit the main reason for my attendance was the food. I always start off with Brazilian barbecue, this time around followed by strawberry-filled churros and washed down with an orange slurry.

There were bands and dance troupes, with a well-used dance floor on the plaza.

The Other Festival.

Paris, France, had a big event July 26 to August 11. These Olympic banners on Stephen Avenue mall seemed silly to me. "Brave Is Unbeatable" was nonsense, as any glance at military or sports history will demonstrate.

Let The Sun Shine In.

The first three weeks of July were 35ºC under cloudless skies. Then the forest fire season began. In southern Alberta the prevailing winds are from the north and west. When the wildfires begin burning in northern Alberta or British Columbia, we get all the smoke.

July 24 and 25 sent us smoky skies which did, however. have one benefit. The heat dome didn't shift but the smoke reflected the sunlight back up into the sky. As a result, temperatures suddenly dropped to 20º to 25ºC.

The Inglewood Sunfest street festival was held on Saturday, July 27, in 25ºC weather. The event ran along 9 Avenue SE in the Inglewood district of central Calgary, on the opposite bank of the Elbow River from the downtown core.

This was Calgary's original core until the railway arrived and the station was placed on the other side of the river. At that point, the citizenry moved their businesses over to what is today's core and Inglewood became a residential suburb for the well-to-do.

Many of the historic buildings along 9 Avenue SE have been preserved but behind them the condominium towers are rising. The view below shows the festival, looking to the east.

Some of the entertainment at the festival.

Not until I saw this photo enlarged on my computer did I notice the spectators in the background were more entertaining than the dancers.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DRINK LIST
Island Lemonade
Mango Tango
Coconut Island
Peach Dream
Candy Crush
Blue Island Breeze
Mixed Berry Twist
ONLY $6


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BRAZILIAN TRUFFLES
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DISCOVER THE BEST OF BRAZILIAN SNACKS
DELICIOUS!
Love and Flavor in Every Bite
CHECK OUT OUR COMBOS
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At every street festival I always look for the YYC Burgers food truck. Best hamburgers I have ever tasted. Lean beef 2 cm thick and fresh green lettuce, not iceberg, which is what most restaurants use. Crisp bacon, not soggy and half-cooked.

And so, until the next festival, that's all he ate.

AROUND CHEZ OPUNTIA
photos by Dale Speirs

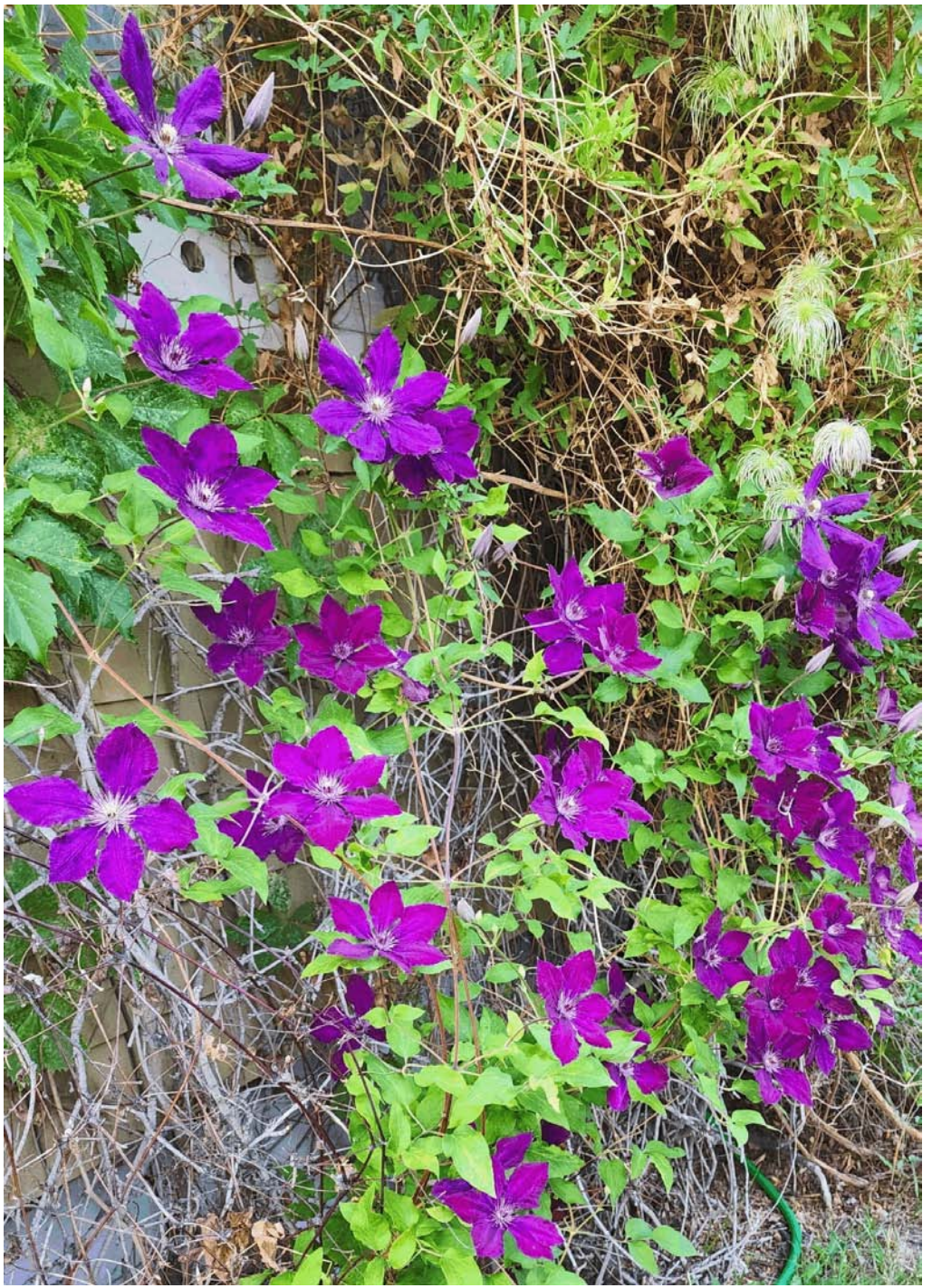
The yard at Chez Opuntia is planted prairie style with wildflowers native to southern Alberta growing directly in the grass, not in flowerbeds. A full bloom was in progress by mid-July.

At right is the view from the front steps. The spikes of cream-coloured flowers are *Yucca glauca*. The yellow and red daisies are *Gaillardia aristata*.

Below: Elsewhere in the front lawn is wild purple aster *Symphyotrichum novae-angliae*.

In my backyard for many years is a clump of fireweed *Epilobium angustifolium*. The flower stalks reach up to two metres high and en masse are most impressive.

Not a native plant, this is *Clematis* cv Honora. It covered the south wall of Chez Opuntia



THE PLAY'S THE THING: PART 2
by Dale Speirs

[Part 1 appeared in OPUNTIA #564.]

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

Tragedy Tomorrow.

QUICK CURTAIN by Alan Melville (pseudonym of William Melville Caverhill) was originally published in 1934 and was reprinted by Poisoned Pen Press in 2017, which was the copy I read. The author wrote this novel as a humourous satire on the business he knew so well. Dorothy L. Sayers complained in her review of this book that he didn't take the genre seriously.

The plot began with producer Douglas B. Douglas (DBD to his friends) promoting a stage musical titled "Blue Music". The premiere was a night to remember because the leading man was shot dead during Act 2 by a prop gun.

Shortly thereafter another cast member was found hanging by a noose in his dressing room. But was it suicide by the murderer? Inspector Wilson of Scotland Yard was in the audience, along with his son Derek, ace newspaper reporter. Neither followed proper police procedure.

Soon after, the leading lady became the next victim. Eventually the musical re-opened to much larger audiences and profits. There is no such thing as bad publicity in the trade. Wilson identified the murderer, who happened to be in one of the boxes on the re-opening night.

The killer had come prepared with poisoned chocolates to commit suicide if the police came for him. They did and he did. Rather implausible. The motive was a love triangle.

Although Wilson correctly identified the culprit, there was an amusing epilogue when a stagehand demonstrated that all of Wilson's deductions were wrong and explainable by other means. Wilson was rather annoyed.

THE METROPOLITAN OPERA MURDERS by Helen Traubel was another Poisoned Pen Press reprint, originally published in 1951 and reissued in 2022, the version that I read.

Traubel was an opera soprano at the Met in the 1940s and 1950s. This was the only novel she published under her name, which was ghostwritten by Harold Q. Masur.

Presumably he did the actual writing while she supplied the background and characters. In lieu of infodumps there were numerous footnotes through the novel explaining this and that in the opera business.

The novel began during the second act of "Die Walkure" when the stage prompter Rudolf Salz died of strychnine poisoning in front of diva Elsa Vaughn and the cast. She missed a few notes but managed to carry on. Karl Ecker was singing tenor as Siegmund. He had a bit of wobble in his voice as he watched Salz die in agony in the prompter's box.

The audience saw nothing of course. They couldn't help but notice that the rest of the performance seemed lackluster. Detective Lieutenant Sam Quentin was assigned to the case. The medical examiner said Salz died of strychnine in a bottle of whiskey he had stolen from Vaughn's dressing room.

She may have been intended as the victim, correlated by previous near-miss incidents aimed at her. One suspect was Vaughn's understudy Hilda Semple, a student of Salz in the same way as Trilby was to Svengali.

Quentin had to weave his way between high-strung singers and management hoping to have the case solved quickly. There were numerous romantic liaisons, most of them triangular. The politics backstage were vicious.

The murder was tied to an older apparently unrelated murder and jewelry theft of Ivy Ecker, wife of Karl, whose suspects suddenly cross-connected to the Salz case. The Met proved to be a dangerous place to sing after Semple was shot dead in Vaughn's dressing room between acts.

Ballistics showed the same gun killed both Ivy and Semple, was registered to Karl, and in possession of Ivy's brother. The newspapers went berserk with the story, as well they might.

The ending was a train wreck that threw the plot completely off the tracks. Ivy had not been murdered but had committed suicide. Salz had the proof and died for it. Vaughn found the evidence and the killer found Vaughn, at which point he explained all the details in a three-page monologue.

The police arrived in the proverbial nick of time, as they were hiding nearby and heard the murderer's exposition. As Quentin said: *Enough to strap him in the Ossining broiler*.

DISASTER AT THE VENDOME THEATER (2022) by M.L. Longworth took place in Aix-en-Provence, France, where a local theater staged a summer play. Backstage there was trouble from the beginning.

The theatre owner and director Anoule Singer was incompetent. The leading man Gauthier Lesage was a boor who resented his come-down to a small theatre. The leading lady Liliane Poncet, once a film star, was polite and accepting about her decline and fall.

Various supporting actors had their woes, as did the production crew. Singer's incompetence began with neglecting to tell the actors which version of the script they were using. Lesage had the knack of annoying people and often did. His subsequent strangulation was therefore not a complete surprise.

Poncet was the second victim. Lots of back stories surfaced. Also lots of texting and recharging of cellphones, more than just passing mentions. The basic rule seemed to be that no one ever checked their texts oftener than once every other day.

The motive was complicated but basically Poncet held stocks in a Canadian gold mine that suddenly paid out big money. Lesage and an accomplice tried to get at the stocks but were stymied because Poncet had the account protected by a password. She wrote the password in her copy of the script, which thus became the MacGuffin.

The explanation in the denouement was complicated and filled most of the final chapter. No word about whether the play went ahead without its two stars.

Comedy Tonight.

During the -30ºC cold spell that Calgary had in January 2024, I did a lot of binge watching of my DVDs. I have the complete set of the comedy television series THE MARY TYLER MOORE SHOW. The series aired from 1970 to 1977 and has held up surprising well.

The show originally portrayed Mary (playing the part of Mary Richards) as a timid new-hire working for the kindly but gruff Lou Grant. The plots were set in the offices of WJM-TV, the perennial last-place station in Minneapolis, Minnesota. As the series developed, so did Mary, becoming a self-confident single woman. Revolutionary at the time.

"We Closed In Minneapolis" was written by Kenny Solms and Gail Parent and aired on 1971-01-30. Staff news writer Murray Slaughter had written a play which was accepted for production. He was pleased but surprised because he hadn't submitted to that theatre.

News reader Ted Baxter, a pompous idiot, explained he had sent the manuscript. He was a regular performer in the company. Murray suddenly was not enthusiastic, given Ted's continual on-the-air fluffs and mis-pronunciations.

Mary got a supporting role thanks to Ted. She suddenly was not enthusiastic, given that Murray had written her part as a dum-dum (her words) named Mary who worked in a newsroom. Murray assured her that he wrote her part that way for comedy and it was nothing personal.

Lou read the script and was not enthusiastic, given that the boss of the newsroom was named Lou and blustered at his staff. He ordered Murray to change the name of the part. Ted then weighed in because he wasn't getting the best lines. Worse yet, he convinced a big-name drama critic to come to the opening night.

The play itself was always off-stage, including the first performance. The opening night was a disaster, compounded by the after-show party being held in Mary's apartment. That was when the details came out.

Ted forgot his lines more than once. Each time he told the audience "*Excuse me.*", walked off stage, and checked the script. The newspaper review, just one, was headlined "Bomb Hits Minneapolis". The critic said the best part was the intermission.

"Hurray For Hollywood" aired on 1969-01-04 as an episode of the comedy television series GET SMART. I have the boxed DVD set of the series and binge watch it every few years. The series ran for five seasons from 1965 to 1970 and was a parody of spy shows and movies.

Maxwell Smart was Agent 86 of the counterspy organization Control, headquartered in Washington, D.C. The enemy was Kaos, a Delaware corporation. Smart was a bumbling fool who stumbled his way through each case but always solved them with fool's luck.

A Digression.

Smart's wife was known only as Agent 99, although she occasionally used different aliases when working on a case. She was the straight woman who had to clean up after her husband's bumbling.

Agent 99 was played by Barbara Feldon, and thereby hangs a tale. Fans of the series speculated what 99's real name was without realizing that the clue was in a different television series THE MAN FROM U.N.C.L.E. The nemesis of UNCLE was THRUSH.

In the 1965-03-22 episode of TMFU titled "The Never-Never Affair", Feldon played an UNCLE agent named Mandy Stevenson. She was stuck in a dead-end job with the agency and bored with the drudge work she was assigned. That was her only appearance in the series.

The GET SMART episode "The Reluctant Redhead" aired on 1968-04-06 during Season 3. Smart, Agent 99, and their boss The Chief were discussing suspects in a case.

99 mentioned that a certain Kaos agent had previously worked for THRUSH. Her remark tied the two series together. Evidently she had transferred to Control for a more exciting job. Therefore her real name was Mandy Sanderson.

Meanwhile, Back At The Plot.

Control had learned Kaos was smuggling information out of the country using a stage play. An actor would recite lines that were coded information. Smart and 99 were infiltrated into the play as supporting actors.

Smart played a butler and very badly. He over-acted and kept changing his accent. When his character was shot with a handgun, he took five minutes to die, staggering around the set and chewing the scenery. Not just figuratively either.

The producer and playwright were Kaos men. They decided to solve two problems at once by having Smart recite the coded lines, then be shot dead by 99 using a prop gun chambered with a live bullet. She didn't know of course.

However she did a bit of overacting herself and shot wide. The Kaos agents rushed the stage but so did Control agents. The audience thought it was all part of the play and laughed heartily. Curtains for Kaos.

Something For Everyone.

CINDERELLA GOES TO THE MORGUE by Nancy Spain was originally published in 1950. The novel was republished in 2021, which was the version I read. The principal characters, in more ways than one, were Miriam Birdseye and Natasha Nevkorina. They were two Miss Marples off stage.

Set in England, the plot was about a pantomime play, a type very popular in Britain even today during the Christmas-New Year season. In Canada, a pantomime is a mute actor but the British tradition is an audience-participation stage play.

The script of a pantomime is loosely based on some fairy tale with lots of humour and singing, often with call-and-response songs in which the audience partakes. The costumes and sets are bright and garish, and there is a lot of cross-dressing.

Which brings the reader to Newchester, where the Theatre Royal proudly hosted its Christmas pantomime CINDERELLA. Miriam and Natasha got minor roles in the play. Prince Charming was played by aging actress Vivienne Gresham, whose son Tony was the stage manager and publicist. Lots of kicking and biting backstage.

During rehearsals, Vivienne departed the production when she fell through a stage trapdoor into the basement and broke her neck. The police wondered why the trapdoor had been left open. Tony had just taken out a large life insurance policy on his dearly beloved mother. His biological father, an actor known as Banjo, had never married Vivienne.

Banjo had his head bashed in while preparing in his dressing room. The show went on as it had to. There was laughter out front and many alarums backstage. The death toll continued to rise, seemingly to eliminate all the cast and crew.

The denouement was the thought processes of the murderer, well before the sleuths identified him. His identity having been divulged to the reader thusly, he then went berserk with a shotgun before the police corralled him. Certainly different from the usual J'accuse! meeting.

There were some messy threads to tie off, not to mention a set-up for the next novel. Other than the dead and the psychologically traumatized characters, the ending was a happy one.

Video Killed The Radio Star.

Jack Benny was widely considered the greatest radio comedian. He began in the 1930s and saw out the end of old-time radio in the middle 1950s. He moved to television but the younger generation watching didn't take to him. His appearances dwindled to the occasional television special until his death in 1974.

His early radio series were variety, music interspersed with unrelated gags. The shows gradually evolved what today we call sitcoms. Benny was a pioneer in this format.

"Jack Doesn't Have a Script" aired on 1955-01-16. Unlike some comedians who claimed they wrote all their own material, Jack Benny made no secret that he relied on a team of a half-dozen writers. A famous quote of his came when someone insulted him at a party and he replied "*You wouldn't dare say that if my writers were here*".

This episode began with Benny and company about to start a performance and discovering the writers had no script. The writers had been partying at Palm Springs and had nothing. This scenario presupposed that the troupe didn't do rehearsals, which seemed strange for a radio sitcom.

The writers, Harry and Sam, were portrayed by actors, not the real writers. Both were short a few bricks of a load and spoke with Noo Yawk accents. When Benny went backstage to get the scripts, they were trying to think of something to write.

They said they didn't have anything to write with, so Benny gave them an automatic pencil. He had to show them how it worked. Returning to the stage, he and his cast did some ad-libbing using old jokes from vaudeville days.

The writers supplied pages at intervals, the story being a clichéd manor house murder mystery. There was a contradiction here because references were made about how the writers couldn't type straight. If they had a typewriter, then why did Benny have to give them a pencil?

The plot of the mystery was the murder of wealthy stockbroker J. Malcolm Smith by his wife and her chauffeur. Typographical errors by the writers included reference to a bugler instead of a butler and a Chef of Police. The victim's name was garbled as J. Malcolm Stock, the smithbroker.

At climactic moments, the script ran out and Benny had to go backstage for more pages. The sound man kept missing his cues, such as starting up a siren before the police officers got into the car.

Finally to the J'accuse! moment, but the script ended just as the murderer was to be named. Benny went backstage but found nothing more written. The writers were arguing as to who the murderer should be. Time ran out on the episode and the murderer never was named.

Cozy Stages.

COACHED IN THE ACT (2021) by Victoria Laurie was a novel about Catherine (Cat) Cooper of East Hampton, New York, who earned her living as a life coach.

Cat attended a one-woman show by Yelena Galanis called "Twelve Angry Men". That was an exposé in which Yelena dished out scandalous details about twelve famous men she had dated and ridiculed them by name. Evidently one of them took violent exception because she was stabbed to death backstage during intermission.

More alarums followed as Cat began Marpleing. She was annoyed by all those police officers who thought they had jurisdiction. One of the twelve men asked Cat to help clear him of suspicion. The field was thus narrowed down to eleven suspects.

Yelena had quite a background herself, including an unacknowledged daughter given up for adoption, plus assorted family and romantic contretemps. The play's script, that is, the actual manuscript copy Yelena used, was evidence in the investigation.

She had annotated the manuscript in ways that might provide clues. She used the script for blackmail against one of the twelve. He set up an elaborate plan which required a follow-up murder and embezzlement.

Cat kept up the Marple tradition of being trapped with the murderer and a last-second escape. All ended well except for the dead and the theatre promoter.

A PARFAIT CRIME (2023) by Maya Corrigan was the ninth novel in a food cozy series about Val Deniston and her grandfather Don Myer of Bayport, Maryland. She operated a café and did catering, while he wrote a recipes column.

Her boyfriend Bram Muir was a volunteer firefighter. As the story began, he had just returned from a fatal fire that killed Jane Johnson. She had been a member of the local book club and was rehearsing an Agatha Christie play THE MOUSETRAP with Val and others.

The firefighters found another body in the house, a man who had evidently been frozen in a deep freezer for years. The freezer was in a locked storage room with only an outside door. They went in to check for fire damage. The fire was later determined to be arson.

All that in the first chapter. Millicent and her husband had sold the house to Jane to pay his medical bills. He hadn't been seen since. The show must go on. Val was offered Jane's part and the rehearsals continued. So did the gossip, with the townfolk speculating wildly in the absence of any facts.

Two sisters, Cassandra and Millicent Rilke, were at the first rehearsal. That produced two pieces of amusing dialogue, the second unintentional by the author.

"Bayport does have a rather high body count, as the two of you know." Cassandra fixed her shrewd gray eyes first on Val and then on Granddad.

"Don't pay any attention to her", Millicent hissed.

How do you hiss that sentence?

The other gossip was about a new spa starting up in town. The owners had renovated a motel and were hiring for plenty of positions. The rehearsals were in Granddad's house which he shared with Val. Every so often during the novel apropos of nothing he would prepare fruit parfaits, as if to justify the book's title.

The play was to be presented on stage as read-only, with the actors seated on stools and scripts in hand. Memorizing scripts and blocking out stage movements were beyond most of the volunteers' capabilities.

Many of the performers were retired or nearly so, and Val was no spring chicken herself. The rehearsals were around her dining room table. Infodumps on how stage plays were presented were sprinkled through the text.

After this point the play was no longer the thing and dropped out of the plot. Val visited the spa, which was preparing for its grand opening. She went for the sleuthing but while she was there she managed to snag a catering contract. Smoothies for 150 guests at the opening.

The police identified the frozen body as Millicent's missing husband. He had been terminally ill and decided to end his life peacefully inside the freezer. He left a suicide note absolving his wife.

Millicent had concocted a story that he had gone away to a sanatorium for his health. That allowed her to keep collecting his Social Security. Not enough to live on but she moved in with her sister Cassandra, who wasn't any wealthier.

That left the questions of who killed Jane and why. On with the Marpleing. The clues and red herrings multiplied like biblical loaves and fishes. Some of the spa's employees were involved in drug dealing in their past lives. Jane knew about them, which made her a threat.

The spa grand opening kept Val busy serving smoothies and spying on suspects. The latter paid off when she foiled an attempted poisoning using her smoothies but then she dumped the evidence in a bin.

The wrap-up raffle and champagne party at the end of the event was disrupted when Jane's ex-husband Wally Witterby stood up and loudly identified the presenter Ron Melgrem as a past drug dealer. The party broke up in disorder.

Later that night Melgrem's body was found in the spa. The connections between the characters were tangled. Melgrem had an affair with Jane back when. He had in fact been a drug dealer who worked as a medical technician and sold the clinic's painkiller drugs on the side.

With the pages running out as the denouement approached, the play once more became the thing. The next rehearsal was on stage so that movements could be blocked out and lighting verified.

The killer was one of the cast, seeking revenge for the drug dealing case. The police anticipated him and foiled his next murder with some clever stagecraft. After he was hauled away, there was champagne for everyone else.

Cozy Broadway.

Jessica Fletcher was the protagonist of MURDER, SHE WROTE, a television mystery series from 1984 to 1997. Although the show is long gone, novels were published long after, bylined as "Jessica Fletcher and [name of ghostwriter]".

Fletcher lived in Cabot Cove, Maine, population 3,560, where most of the early murders were concentrated. Fans of the show calculated the town's murder rate was 149 per 100,000 on a per capita basis, which made the place the murder capital of the world. In later episodes and novels, she went traveling so as to spread the murders around.

KNOCK 'EM DEAD (1999) by Jessica Fletcher and Donald Bain opened with an ominous remark by Fletcher to some guests from New York City who were visiting Cabot Cove. In the preface, Fletcher remarked: "*I was pleased to read that the murder rate in New York is down.*"

The guests mentioned there was a serial killer roaming the Broadway theatres. And with that, the stage was set (pun intended). Jumping ahead in time, Fletcher was indeed on Broadway, where one of her novels had been optioned as a play.

Someone cancelled producer Harry Schrumm's option by putting a knife into his chest. There was no shortage of trouble backstage. The lead actress was fired just as rehearsals began. Schrumm had been ghost payrolling. The script writer was feuding with the actors. Okay, so that last one was normal.

Many people thought the serial killer was back in action, while others believed Schrumm brought his misfortune upon himself. Fletcher, with the news media barking at her heels, sleuthed. The publicity was great for the show though.

The dress rehearsal was a doozy, adding to the death toll. There were two separate murderers taking out different targets for different reasons, which complicated the investigation.

THE MAN FROM U.N.C.L.E. episode "The Off-Broadway Affair" aired on television on 1966-11-18, written by Jerry McNeely. The opening was the premiere of a very bad musical play.

Despite the vicious reviews, the producer, named Machina, bought the house seats and gave away the tickets in order to keep the play running. He and his evil employers THRUSH were tapping into the UNCLE mainframe computer in the building next door to the theatre.

UNCLE agents Napoleon Solo and Ilya Kuryakin infiltrated the theatre and endured assorted alarums. They made friends with one of the understudies Janet Jerrod, who yearned for stardom and had no idea what was going on. (Played by Sheri Lewis of Lamb Chop fame.)

Machina had other problems besides dealing with UNCLE agents. His project involved tunneling next to the UNCLE building for the intercept equipment. THRUSH Central gave him a hard time about cost overruns. Even evil organizations have to watch their budgets.

All was discovered. The finale was on the stage directly above, where UNCLE and THRUSH agents fought each other in the midst of the dancers. The audience thought that was part of the play. The subsequent reviews were wonderful. Critics commented how realistic the fight scenes were.

Old Time Stages.

BLACKSTONE, THE MAGIC DETECTIVE was an old-time radio series that aired from 1948 to 1950. There were 79 episodes, written by Walter B. Gibson and Nancy Webb. Available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

The character was based on a real magician Harry Blackstone Sr, although the plots weren't. Rhoda Brent was his stage assistant. The episodes were 15 minutes with commercials, which were edited out in the mp3s, reducing them to about 12 minutes each. Quick and easy listening on your morning commute.

"Murder On Stage" aired on 1948-12-26. The story began with Blackstone and Rhoda performing a new trick with a glass tank. They were assisted by a temporary helper Steve. Incredibly Steve began putting moves on Rhoda in the middle of the act. Most molesters prefer to work out of the public eye. Blackstone was to escape from the water-filled tank.

Steve decided to attack Rhoda on stage in the belief, correctly, that the audience would think they were doing an act. He was so busy trying to hurt her that he forgot about Blackstone. So did the audience, allowing Blackstone to perform his escape and then render Steve harmless. Blackstone explained the trick to the radio listeners and said he never attempted the stunt again.

STAND BY FOR ADVENTURE was an old-time radio series about which little has been written that I can find. Most sources date the series as 1950 but www.worldradiohistory.com has free pdfs of two radio magazines which date the series as 1944 and 1946.** Those references were to packaged transcriptions on disks, so probably they were still being aired in 1950 as repeats.

Some episodes are available at the Old Time Radio Researchers website at www.otrr.org/OTRRLibrary although the titles are garbled. The mp3s are 10 minutes each, indicating that these were 15-minute shows once commercials were added.

"Murder In Production" began with the deaths of three scriptwriters for a musical comedy. All died of poison gas but in different locations. The narrator went sleuthing and experienced various alarums.

The deceased all had used menthol inhalers to clear their sinuses. The murderer substituted poison gas. The three men were a committee who would decide the financing of the murderer's play. They didn't think much of it, so the killer launched a purge.

** NBC display ad (1944 April) RADIO SHOWMANSHIP, page 111
All-Canada Program Division (1946-02-23) CANADIAN BROADCASTER, page 2

BOTANICAL FICTION: PART 17

by Dale Speirs

[Parts 1 to 16 appeared in OPUNTIAs #316, 317, 320, 323, 325, 334, 369, 380, 402, 412, 438, 459, 476, 506, 519, and 539.]

Trees.

HIGH ADVENTURE aired in South Africa from 1972 to 1985 on the commercial network Springbok Radio. It should not be confused with an American series of the same name which aired from 1947 to 1954. The South African series is available as free mp3s from the Old Time Radio Researchers at www.otrr.org/OTRRLibrary

"The Redwood Tree" was written by Norman Parkinson and aired in 1979. Set in northern California in contemporary times, a road crew was working its way through the redwood forest. One of the 2,000-year-old trees had to come out to make way for the road but there were obstacles.

Firstly, a shotgun-carrying aboriginal warned off the crew, telling them the tree was protected by the spirits. The foreman called the police, who hauled the tribesman off to jail.

Attempts to cut down the tree were plagued by bizarre and unlikely equipment failures that could not be explained. Then the news media and treehuggers arrived just the crew set dynamite to blow down the tree. In the end an order came to detour the road around the tree, quite an anticlimax. All told, not much of a plot.

Vegetables Of The Third Kind.

"Strange Harvest" by Edward Willett, from his 2018 collection PATHS TO THE STARS, was set in rural Saskatchewan back when villages still had newspapers.

The editor was bombarded every harvest season with people bringing in strange plants such as obscenely shaped cucumbers, two-headed wheat stalks, and heart-shaped tomatoes.

Came the season when a little old lady brought in a ceramic tomato that released a cloud of brown dust when smashed. Other oddities appeared, such as acid-filled carrots. The editor drove out to the farms, which centred around one location.

He found an alien spaceship with what appeared to be a sentient plant. The alien was apparently intending to liberate its fellow beings from the thrall of animals. There were alarums but he survived. The spaceship took off.

No one would believe him so he kept quiet. He wondered about what next year's seeds would grow. One of the farms was a registered seed producer, whose crop would be distributed across the province next spring.

Garden Wars.

BACKYARD (2014) by Norman Draper took place somewhere in suburbia. As the winter snow melted away, Jasper Burdick, of Burdick's Plant World, received a vision in an overheated sauna.

Someone finally turned down the heat. By then, the Burdick's Best Yard Contest had come into being. First prize was $200,000, which garnered Burdick that much free publicity and boosted sales. And so the summer progressed.

Among the contenders were George and Nan Fremont, who spent enough on their garden to put themselves on a financial cliff edge. Dr Phyllis Sproot (PhD, Horticulture) was a fanatical gardener who was always right and wanted everyone to follow her rules of gardening. Or else.

Marta Poppendauber was a casual gardener who was blackmailed into assisting Sproot in nefarious escapades to win the contest. Competitors' gardens were vandalized. There was one scene with police drawing their guns and ordering "*Put down that chainsaw, ma'am*".

There were some twists in the denouement. The winners got in on the sympathy vote but were deserving in more ways than one.

MUMS AND MAYHEM (2020) by Amanda Flower (apparently her real name) was the third novel in a cozy series about Fiona Knox, a florist in Bellewick, Scotland. She owned a magical garden on the side and by now was established as a working Miss Marple.

She had two crosses to bear. The Merchant Society (= Chamber of Commerce) was staging a concert in honour of fiddler Barley McFee, a local boy who made good on the international scene. Fiona had been dragooned in as a volunteer. Secondly, her parents were coming from Tennessee to visit her and sister Isla.

McFee was an egotistical boor who used sharp practice to climb to the top of the Scots fiddle world. There wasn't complete surprise when he was murdered during the intermission of the concert. Fiona found his body of course.

She had her own problems. Someone sabotaged Fiona's magical garden. Her biggest shock was when her mother told her that the man she thought was her father wasn't. She had been sired by her long-deceased godfather, the man who bequeathed to her the magical garden.

In the midst of this, and occasionally selling flowers, Fiona went about dredging up past family and village history, as well as the rubbish that McFee had been up to. The killers had a longstanding grudge against McFee over past business relations. They got a longstanding sentence. The good news was that the garden was restored.

Toxic Botany.

A BOTANIST'S GUIDE TO PARTIES AND POISONS (2022) by Kate Khavari was about Saffron Everleigh, who was a research assistant at University College London in 1923. In the Botany Dept. she had to put up with both rampant chauvinism and upper-class snobbery.

During a dinner party of mostly botanists, the talk was of a forthcoming expedition to the Amazon, led by Dr Lawrence Henry. The talk changed when his wife Cynthia took a sip of champagne flavoured with poison and fell to the floor.

The Henrys had an unhappy marriage but initial suspicion actually fell on Saffron's supervisor Dr Alan Maxwell. The two men had feuded because Lawrence refused Alan a place in the expedition.

In truth, there was plenty of suspicion to go around the department as all the professional botanists were familiar with a wide variety of botanical toxins. Alan had a collection of the deadliest plants, hence the police interest in him.

The question was if the wrong glass of champagne had been poisoned and Cynthia was an innocent victim. Saffron took up Marpleing and began her own investigation. Eventually, after the usual alarums, the culprits were discovered.

Cynthia was indeed the intended victim because she had discovered two men were embezzling university funds. Thousands of pounds sterling, say a million in today's depreciated currency. The culprits were members of the Amazon expedition. Their plan was to get away from justice to enjoy a good life in extradition-free Brazil.

WHEN SOMETIME LOFTY TOWERS I SEE: PART 6
by Dale Speirs

[Parts 1 to 5 appeared in OPUNTIAs #284, 343, 369, 423, and 454.]

Building Skyscrapers.

"The Little Tin Box" by James Francis Dwyer (1908 September, THE BLACK CAT, available as a free pdf from www.archive.org) was a macabre story about two steelworkers up on the high iron.

Morgan the foreman had found a small tin box belonging to one of his workers Johnson. Sniffing the box, he confirmed that Johnson was an opium eater, not the best type of man to have riveting beams on a skyscraper.

The men chatted about the sidewalk crowds far below watching them. They were waiting and hoping for someone to fall. That would give them a story to dine out on for years. Johnson became more and more agitated. He needed a chew and he needed it now.

Morgan took pity and tossed him the little box. A gust of wind blew it over the side. Johnson lunged for it and in doing so knocked Morgan off the beam. The two men followed the box and gave the sidewalk crowd a good show.

It is not unknown for skyscraper technology to get ahead of itself. As an example, "The Ultimate Metal" by Nat Schachner (1935 February, ASTOUNDING, available as a free pdf from www.archive.org) was a cautionary tale.

A 150-storey skyscraper had been built in Manhattan, made of the revolutionary metal coultonite, an alloy of titanium, beryllium, and evanium. If that last one doesn't seem familiar, it was element 93. Today it is known as neptunium, first synthesized in 1940.

But that was later and this was then. Despite little knowledge of its long-term properties, evanium was rushed into use in the coultonite alloy to build the tower. Too soon, as the building owner learned.

After the skyscraper opened, it began to change. The coultonite became iridescent, then shook itself down and became a liquid-crystal metal. Then it came alive, much to the distress of the 50,000 occupants. Finally it hatched and flew up before evaporating in mid-air. That's one way to terminate a lease.

Fantastic Skyscrapers.

"Next Stop, Nowhere" by Dick Purcell (1956 August, IMAGINATION, available as a free pdf from https://gutenberg.org) was about an elevator ride whose four occupants never completed the trip. The car stalled between floors and the four strangers found themselves waiting for rescue.

Instead, they were suddenly transported into knee-high grass. Inspection of their surroundings revealed the grass hadn't grown, they had shrunk. A giant man came by, picked them up, and boxed them as a birthday present. No logical explanation was offered.

The ending was absolute nonsense. One of the four quickly began to grow to giant size. As he did so, he told the other three that they were a present for his wife.

His thought processes had been open to the reader, and he had been depicted as ignorant of the situation as the other three. Now there was a twist indicating that the whole thing was his plot. Boo, hiss.

LETTERS TO THE EDITOR

[Editor's remarks in square brackets. Please include your name and town when sending a comment. Email to opuntia57@hotmail.com]

FROM: Ray Palm 2024-07-21
Plattsburgh, New York

I'm impressed with how you composed the cover photo for OPUNTIA #575 with the subject in the lower righthand corner. The ripples in the water flow in the same direction as the duck, filling in the large remaining area. I don't see that composition being used very often.

[I learned how to compose photographs back in the days of film cameras, when I had to pay for each photo whether it was good or bad. With the advent of digital cameras, the majority of people using them just bang away and churn out photos without any thought of composing them, then post them all on the Internet. Today I use only digital cameras and wouldn't go back to film but I still take time to compose each shot.]

FREE STUFF ONLINE

I provide sources for the scientific pdfs and old-time radio 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.

Many 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 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 https://gutenberg.org

SEEN IN THE LITERATURE

Asteroids.

Jiao, Y., et al (2024) **Asteroid Kamo‘oalewa’s journey from the lunar Giordano Bruno crater to Earth 1:1 resonance.** NATURE ASTRONOMY 8:doi.org/10.1038/s41550-024-02258-z

Authors’ abstract: *Among the nearly 30,000 known near-Earth asteroids (NEAs), only tens possess Earth co-orbital characteristics with semi-major axes ~1 AU.*

In particular, 469219 Kamo‘oalewa (2016 HO3), an upcoming target of China’s Tianwen-2 asteroid sampling mission, exhibits a meta-stable 1:1 mean-motion resonance with Earth.

Intriguingly, recent ground-based observations show that Kamo‘oalewa has spectroscopic characteristics similar to space-weathered lunar silicates, hinting at a lunar origin instead of an asteroidal one like the vast majority of NEAs.

Here we use numerical simulations to demonstrate that Kamo‘oalewa’s physical and orbital properties are compatible with a fragment from a crater larger than 10 to 20 km formed on the Moon in the last few million years.

The impact could have ejected sufficiently large fragments into heliocentric orbits, some of which could be transferred to Earth 1:1 resonance and persist today.

This leads us to suggest the young lunar crater Giordano Bruno (22 km diameter, 1 to 10 megayears age) as the most likely source, linking a specific asteroid in space to its source crater on the Moon.

Origin Of Life.

Moody, E.R.R., et al (2024) **The nature of the last universal common ancestor and its impact on the early Earth system.** NATURE ECOLOGY AND EVOLUTION 8:doi.org/10.1038/s41559-024-02461-1 (available as a free pdf)

Authors’ abstract: *The nature of the last universal common ancestor (LUCA), its age and its impact on the Earth system have been the subject of vigorous debate across diverse disciplines, often based on disparate data and methods.*

Age estimates for LUCA are usually based on the fossil record, varying with every reinterpretation. The nature of LUCA’s metabolism has proven equally contentious, with some attributing all core metabolisms to LUCA, whereas others reconstruct a simpler life form dependent on geochemistry.

Here we infer that LUCA lived ~4.2 gigayears ago (4.09 to 4.33 Ga) through divergence time analysis of pre-LUCA gene duplicates, calibrated using microbial fossils and isotope records under a new cross-bracing implementation.

Phylogenetic reconciliation suggests that LUCA had a genome of at least 2.5 Mb (2.49 to 2.99 Mb), encoding around 2,600 proteins, comparable to modern prokaryotes. Our results suggest LUCA was a prokaryote-grade anaerobic acetogen that possessed an early immune system.

Although LUCA is sometimes perceived as living in isolation, we infer LUCA to have been part of an established ecological system. The metabolism of LUCA would have provided a niche for other microbial community members and hydrogen recycling by atmospheric photochemistry could have supported a modestly productive early ecosystem.

The common ancestry of all extant cellular life is evidenced by the universal genetic code, machinery for protein synthesis, shared chirality of the almost-universal set of 20 amino acids and use of ATP as a common energy currency.

The last universal common ancestor (LUCA) is the node on the tree of life from which the fundamental prokaryotic domains (Archaea and Bacteria) diverge.

As such, our understanding of LUCA impacts our understanding of the early evolution of life on Earth. Was LUCA a simple or complex organism? What kind of environment did it inhabit and when?

Previous estimates of LUCA are in conflict either due to conceptual disagreement about what LUCA is or as a result of different methodological approaches and data.

Published analyses differ in their inferences of LUCA's genome, from conservative estimates of 80 orthologous proteins up to 1,529 different potential gene families.

Paleobiology.

Gaines, R.R., et al (2024) **The Emu Bay Shale: A unique early Cambrian Lagerstätte from a tectonically active basin.** SCIENCE ADVANCES 10:doi.org/10.1126/sciadv.adp2650 (available as a free pdf)

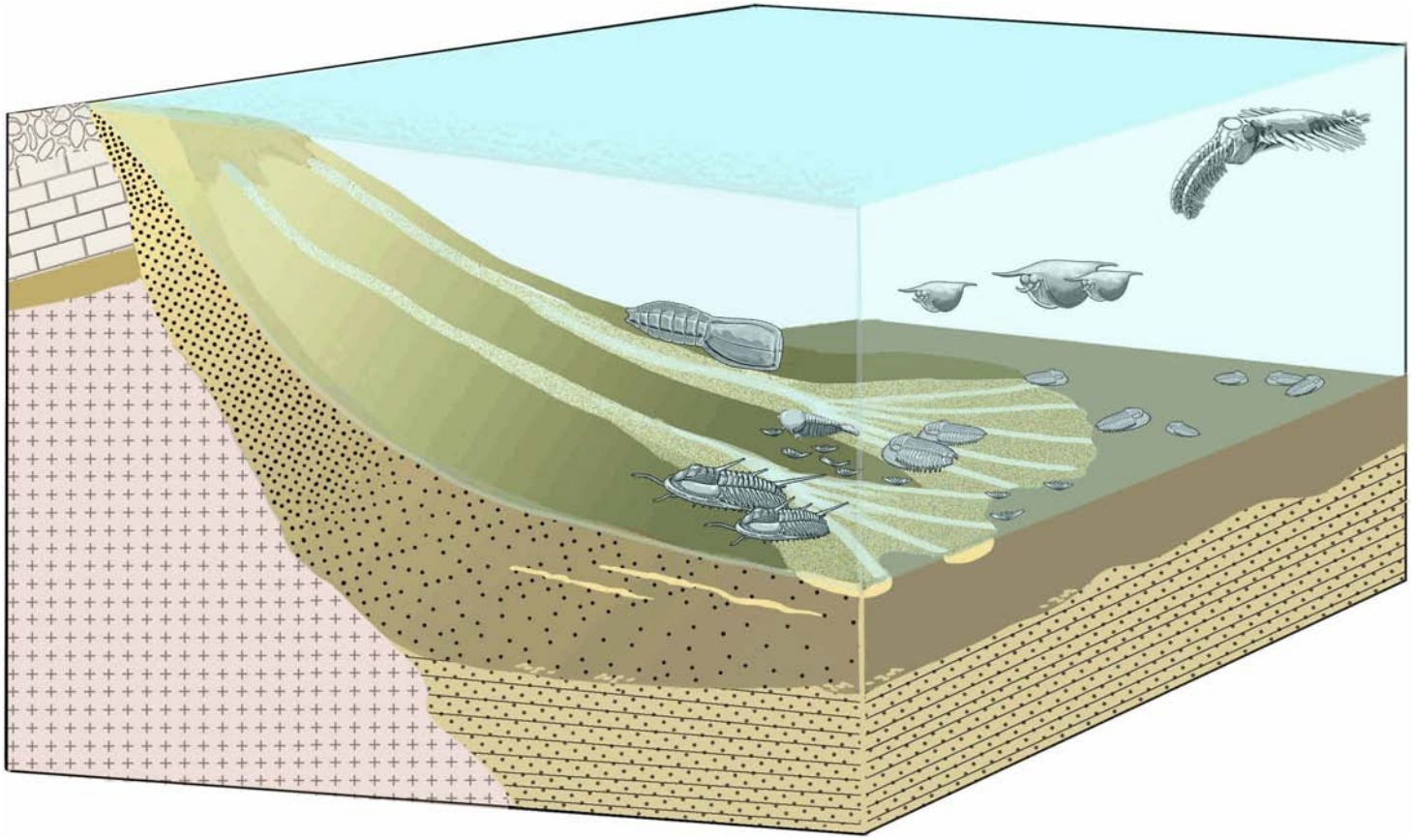
[A lagerstätte is a fossil bed with extremely fine sediments and very well preserved fossils, often with outlines of the internal organs. The Cambrian was when multicellular animals suddenly diversified and produced most of the basic body plans found today.]

Authors' abstract: *The Emu Bay Shale (EBS) of South Australia is anomalous among Cambrian Lagerstätten because it captures anatomical information that is rare in Burgess Shale-type fossils, and because of its inferred nearshore setting, the nature of which has remained controversial.*

Intensive study, combining outcrop and borehole data with a compilation of >25,000 fossil specimens, reveals that the EBS biota inhabited a fan delta complex within a tectonically active basin. Preservation of soft-bodied organisms in this setting is unexpected and further underscores differences between the EBS and other Cambrian Lagerstätten.

Environmental conditions, including oxygen fluctuations, slope instability, high suspended sediment concentrations, and episodic high-energy events, inhibited colonization of the lower pro-delta by all but a few specialist species but favored downslope transportation and preservation of other largely endemic, shallow-water benthos.

The EBS provides extraordinary insight into early Cambrian animal diversity from Gondwana. These results demonstrate how environmental factors determined community composition and provide a framework for understanding this unique Konservat-Lagerstätte.



[Image is from this paper and shows a reconstruction of how the fossil beds were formed.]

Panciroli, E., et al (2024) **Jurassic fossil juvenile reveals prolonged life history in early mammals.** NATURE 631:doi.org/10.1038/s41586-024-07733-1 (available as a free pdf)

Authors' abstract: *Living mammal groups exhibit rapid juvenile growth with a cessation of growth in adulthood. Understanding the emergence of this pattern in the earliest mammaliaforms (mammals and their closest extinct relatives) is hindered by a paucity of fossils representing juvenile individuals.*

We report exceptionally complete juvenile and adult specimens of the Middle Jurassic docodontan Krusatodon, providing anatomical data and insights into the life history of early diverging mammaliaforms.

We used synchrotron X-ray micro-computed tomography imaging of cementum growth increments in the teeth to provide evidence of pace of life in a Mesozoic mammaliaform.

The adult was about 7 years and the juvenile 7 to 24 months of age at death and in the process of replacing its deciduous dentition with its final, adult generation.

When analysed against a dataset of life history parameters for extant mammals, the relative sequence of adult tooth eruption was already established in Krusatodon and in the range observed in extant mammals but this development was prolonged, taking place during a longer period as part of a significantly longer maximum lifespan than extant mammals of comparable adult body mass (156 grammes or less).

Our findings suggest that early diverging mammaliaforms did not experience the same life histories as extant small-bodied mammals and the fundamental shift to faster growth over a shorter lifespan may not have taken place in mammaliaforms until during or after the Middle Jurassic.

Among living mammals, species with smaller adult body mass generally develop quickly, mature younger, live shorter lives and have larger litters than those with larger body masses.

The immediate predecessors of mammals (Mammaliaformes, the group that includes Mammalia and their closest extinct relatives) had very small adult body masses (less than 100 grammes) and were at least moderately endothermic but also exhibited longer lifespans and slower growth rates than small-bodied mammals of today.

A paucity of fossil material of juveniles among early diverging mammaliaforms limits our understanding of early ontogenetic growth in these animals and the macroevolution of life history traits along the mammalian stem lineage.

We report partial skeletons of a juvenile (about 40% complete) and adult (more than 95% complete) docodontan mammaliaform Krusatodon kirtlingtonensis, from the Bathonian Kilmaluag Formation (about 166 million years ago (Ma)), at the Elgol Coast Site of Special Scientific Interest (SSSI), Isle of Skye, Scotland.

Propagation phase-contrast synchrotron radiation X-ray micro-computed tomography of circum-annually deposited increments preserved in dental cementum reveals a prolonged early development in Krusatodon compared to modern mammals of similar adult body mass (156 g or less), with delayed dental eruption more like that of slow-growing extant mammals with larger body masses and longer maximum lifespans.

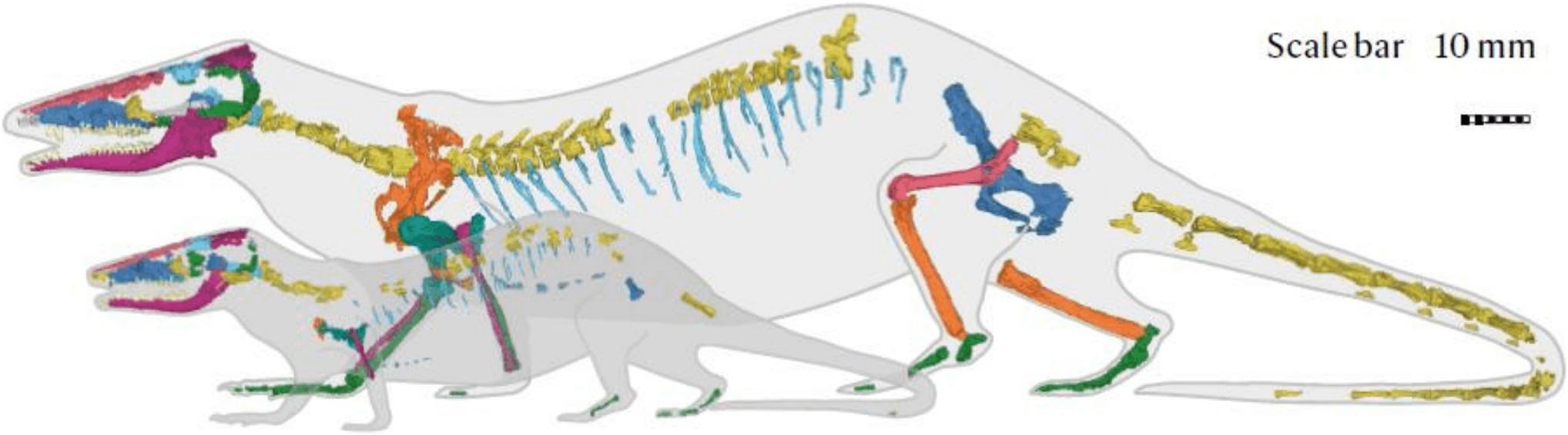
Nevertheless, the timing and sequence of eruption of adult teeth (related to weaning) relative to mandible length (a proxy for body size) is proportional to that of similar-sized extant mammals.

This suggests that the ancestral blueprint of mammal growth had emerged by the Middle Jurassic but that this growth took place over a prolonged time period as a result of slower growth rates, as evidenced by cementochronology.

Mammals today comprise about 6,400 species in three major clades and exhibit a diverse range of life histories and developmental patterns. The earliest-diverging (about 180 to 160 megayears ago) clade, the monotremes, are long-lived (22 to 50 years) and oviparous, laying small eggs (17 mm) that hatch highly altricial neonates that develop relatively quickly.

Placental mammal young are born relatively precocial compared to monotremes and marsupials, which may have facilitated their impressive ecological diversity and wide range of locomotor abilities.

[Image on the next page is from this paper.]


Scale bar 10 mm

Harzhauser, M., et al (2024) **The Central Paratethys Sea: rise and demise of a Miocene European marine biodiversity hotspot.** SCIENTIFIC REPORTS 14:doi.org/10.1038/s41598-024-67370-6 (available as a free pdf)

[The Tethys Ocean was closed off by plate tectonics but once ran parallel north of the Mediterranean Sea. The only remnants of Tethys today are the Black Sea and Caspian Sea.]

Authors' abstract: *The Miocene Climate Optimum (MCO, ~ 17 to 14 megayears ago) was a time of extraordinary marine biodiversity in the Circum-Mediterranean Region.*

This boom is best recorded in the deposits of the vanished Central Paratethys Sea, which covered large parts of central to southeastern Europe. This sea harbored an extraordinary tropical to subtropical biotic diversity.

Here, we present a georeferenced dataset of 859 gastropod species and discuss geodynamics and climate as the main drivers to explain the changes in diversity.

The tectonic reorganization around the Early/Middle Miocene boundary resulted in the formation of an archipelago-like landscape and favorable conditions of the MCO allowed the establishment of coral reefs.

Both factors increased habitat heterogeneity, which boosted species richness. The subsequent cooling during the Middle Miocene Climate Transition (~ 14 to 13 Ma) caused a drastic decline in biodiversity of about 67%.

Among the most severely hit groups were corallivorous gastropods, reflecting the loss of coral reefs. Deep-water faunas experienced a loss by 57% of the species due to changing patterns in circulation.

The low sea level led to a biogeographic fragmentation reflected in higher turnover rates. The largest turnover occurred with the onset of the Sarmatian when bottom water dysoxia eradicated the deep-water fauna whilst surface waters-dwelling planktotrophic species underwent a crisis.

[Images are from this paper.]

Figure 1. Paleogeography of the Circum-Mediterranean Region during the Burdigalian (**A**) and Langhian (**B**)

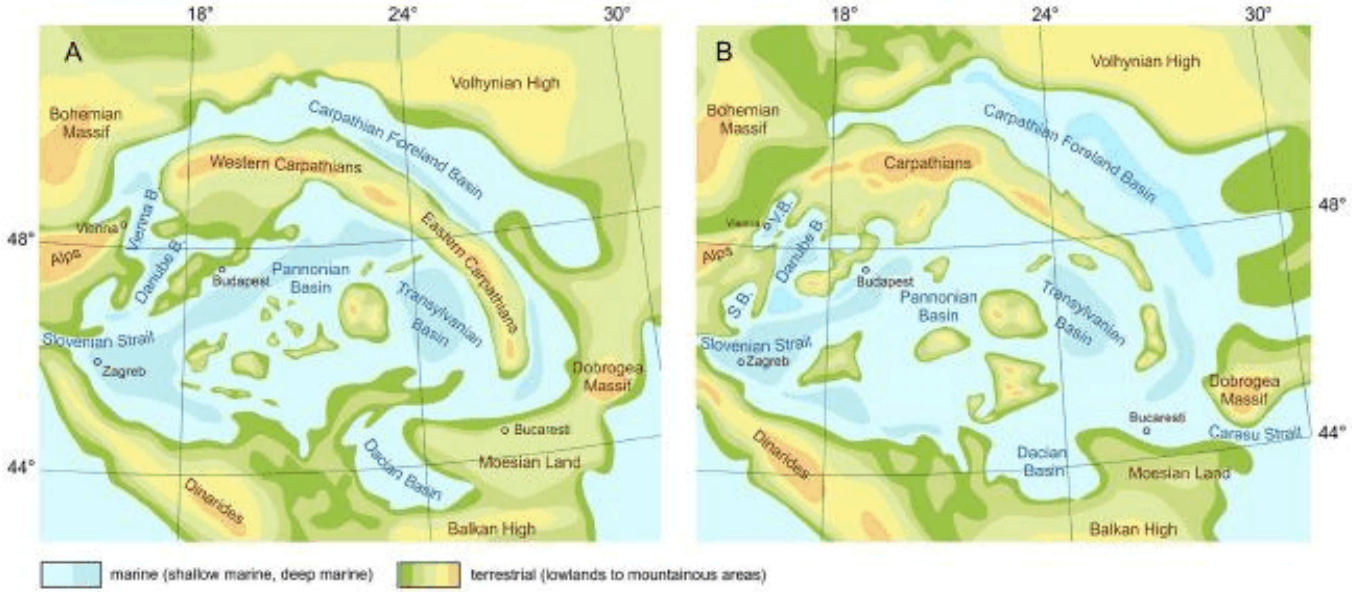


Figure 2. Paleogeographic situation of the Central Paratethys Sea during the Langhian/early Badenian (**A**) and the Serravallian/late Badenian (**B**) with major sedimentary basins and gateways to adjacent regions

Dinosaurs.

Avrahami, H.M., et al (2024) **A new semi-fossorial thescelosaurine dinosaur from the Cenomanian-age Mussentuchit Member of the Cedar Mountain Formation, Utah.** ANATOMICAL RECORD 307:doi.org/10.1002/ar.25505 (available as a free pdf)

[Small burrowing dinosaurs are not the stuff of sci-fi movies but they existed. The words fossorial and fossil both have the same root, that of being in the ground.]

Authors' abstract: *Thescelosaurines are a group of early diverging, ornithischian dinosaurs notable for their conservative bauplans and mosaic of primitive features.*

Although abundant within the latest Cretaceous ecosystems of North America, their record is poor to absent in earlier assemblages, leaving a large gap in our understanding of their evolution, origins, and ecological roles.

Here we report a new small bodied thescelosaurine, Fona herzogae gen. et sp. nov., from the Mussentuchit Member of the Cedar Mountain Formation, Utah, USA.

Fona herzogae is represented by multiple individuals, representing one of the most comprehensive skeletal assemblages of a small bodied, early diverging ornithischian described from North America to date.

Phylogenetic analysis recovers Fona as the earliest member of Thescelosaurinae, minimally containing Oryctodromeus, and all three species of Thescelosaurus, revealing the clade was well-established in North America by as early as the Cenomanian, and distinct from, yet continental cohabitants with, their sister clade, Orodrominae.

To date, orodromines and thescelosaurines have not been found together within a single North American ecosystem, suggesting different habitat preferences or competitive exclusion.

Osteological observations reveal extensive intraspecific variation across cranial and postcranial elements, and a number of anatomical similarities with Oryctodromeus, suggesting a shared semi-fossorial lifestyle.

Mallon, J.C., and D.W.E. Hone (2024) **Estimation of maximum body size in fossil species: A case study using *Tyrannosaurus rex*.** ECOLOGY AND EVOLUTION 14:doi.org/10.1002/ece3.11658 (available as a free pdf)

Authors' abstract: *Among extant species, the ability to sample the extremes of body size, one of the most useful predictors of an individual's ecology, is highly unlikely. This improbability is further exaggerated when sampling the already incomplete fossil record.*

We quantify the likelihood of sampling the uppermost limits of body size in the fossil record using Tyrannosaurus rex as a model, selected for its comparatively well-understood life history parameters.

We computationally generate a population of 140 million T. rex (based on prior estimates), modelling variation about the growth curve both with and without sexual dimorphism (the former modelled after Alligator mississippiensis), and building in sampling limitations related to species survivorship and taphonomic bias, derived from fossil data.

The 99th percentile of body mass in T. rex has likely already been sampled, but it will probably be millennia before much larger giants (99.99th percentile) are sampled at present collecting rates.

Biomechanical and ecological limitations notwithstanding, we estimate that the absolute largest T. rex may have been 70% more massive than the currently largest known specimen (~15,000 vs. ~8,800 kg).

Body size comparisons of fossil species should be based on ontogenetically controlled statistical parameters, rather than simply comparing the largest known individuals whose recovery is highly subject to sampling intensity.

But which is the biggest dinosaur (or example of some subclade or ecological guild) ever found and which is the biggest that ever lived are two separate considerations.

The first is relatively straightforward to answer, notwithstanding complications in estimating body mass and comparing skeletons of variable completeness. The second consideration is the more difficult to address.

After all, to use a familiar example, ~2.5 billion (± an order of magnitude) individual Tyrannosaurus rex, are estimated to have existed over the course of the ~2.4 million-year span of the species, and, of these, only 84 reasonably complete skeletons, that is, those that are diagnostic to species level, have been collected (this number includes privately owned specimens.

Surely, having sampled just 3.4×10^{-6} per cent of the presumed total population, it is extraordinarily unlikely that palaeontologists have discovered the largest T. rex ever to have prowled the late Maastrichtian floodplains of North America.

[Image is from this paper.]

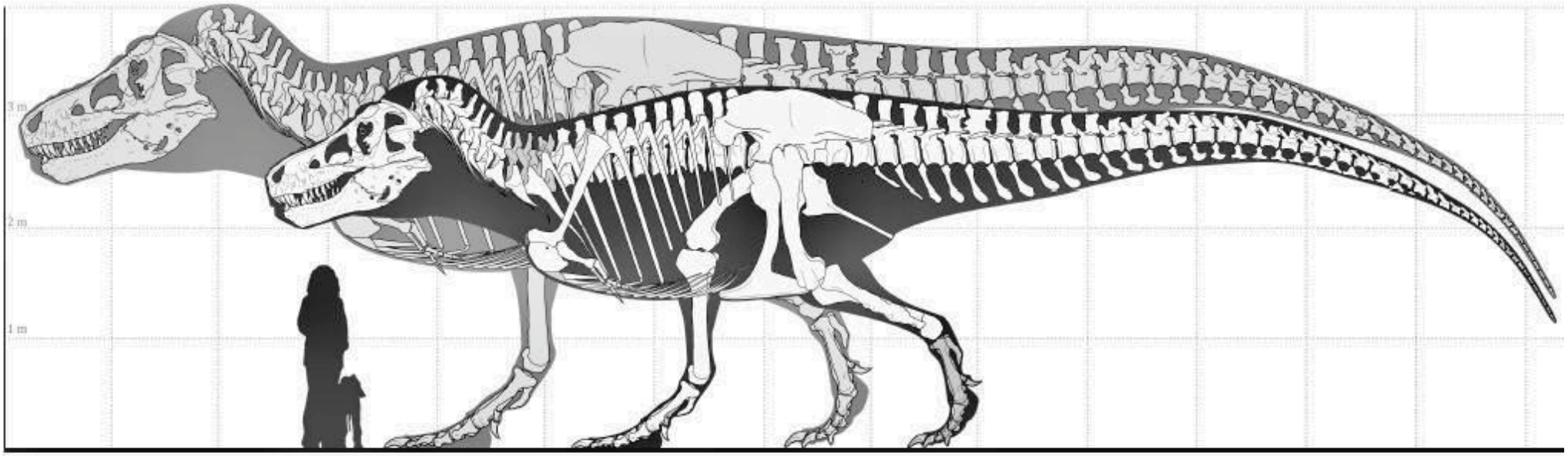


FIGURE 4 Comparison of FMNH PR 2081 ('Sue'), among the world's largest known *Tyrannosaurus rex*, to the estimated largest possible *T. rex* in the background. Human with dog silhouette for scale. Note: the larger skeleton has been scaled up from the smaller according to allometric principles. Reconstruction © Mark Witton (used with permission).

Environmental Science.

Sweetman, A.K., et al (2024) **Evidence of dark oxygen production at the abyssal seafloor.** NATURE GEOSICENCE 17:doi.org/10.1038/s41561-024-4-01480-8 (available as a free pdf)

[Nodules of precipitated metals on the ocean floor react with seawater and release oxygen. This suggests that proposed nodule mining should not be indiscriminate.]

Authors' abstract: *Deep-seafloor organisms consume oxygen, which can be measured by in situ benthic chamber experiments.*

Here we report such experiments at the polymetallic nodule-covered abyssal seafloor in the Pacific Ocean in which oxygen increased over two days to more than three times the background concentration, which from ex situ incubations we attribute to the polymetallic nodules.

Given high voltage potentials (up to 0.95 V) on nodule surfaces, we hypothesize that seawater electrolysis may contribute to this dark oxygen production. Oxygen (O_2) is prevalent in deep-sea surface sediments where its rate of consumption reflects the sum of aerobic respiration and oxidation of reduced inorganic compounds produced by anaerobic decay.

These processes define sediment community O_2 consumption (SCOC), and quantifying SCOC is needed to estimate fluxes of major elemental cycles through marine systems.

In contrast to previous deep-sea O_2 flux studies that only showed SCOC, we consistently found that more O_2 was accumulating in the chambers than was being consumed, resulting in net O_2 production.

Golawska, S., et al (2024) **Tourism influences escape behavior of lizards in relationship with human clothing color.** SCIENTIFIC REPORTS 14:doi.org/10.1038/s41598-024-68092-5 (available as a free pdf)

Authors' abstract: *Increased tourism pressure modifies animal behavior, including alterations in anti-predator responses and foraging activity. In areas with high tourist presence, animals may become accustomed to increased human activity and adjust the intensity of some defensive responses.*

An animal's antipredation ability is usually estimated by measuring its Alert Initiation Distance (AID) and Flight Initiation Distance (FID). Both indexes are affected by multiple factors including the color of the observer's clothing.

Animal behavior is also influenced by human presence, and individuals may become accustomed to increased human presence, e.g. in tourist areas. In this study, we analysed the escape behavior of the endemic Cyprus rock agama (Laudakia cypriaca) in relation to the observers clothing color.

Our results showed that AIDs and FIDs of agamas in tourist areas were significantly shorter than those in non-tourist areas. Moreover, in non-tourist areas, AIDs and FIDs of agamas were significantly longer when the observer wore red clothes, compared to green and grey clothes.

Our results may be helpful in planning research taking into account various colored clothing based on expected reptilian reactions.

Furthermore, our results may determine the proximity at which humans interact with animals, considering clothing color, to prevent negative impacts especially on rare and protected lizard species.

Human Prehistory.

Librado, P., et al (2024) **Widespread horse-based mobility arose around 2200 bce in Eurasia.** NATURE 631:doi.org/10.1038/s41586-024-07597-5 (available as a free pdf)

Authors' abstract: *Horses revolutionized human history with fast mobility. However, the timeline between their domestication and their widespread integration as a means of transport remains contentious.*

Here we assemble a collection of 475 ancient horse genomes to assess the period when these animals were first reshaped by human agency in Eurasia. We find that reproductive control of the modern domestic lineage emerged around 2200 BCE, through close-kin mating and shortened generation times.

Reproductive control emerged following a severe domestication bottleneck starting no earlier than approximately 2700 BCE, and coincided with a sudden expansion across Eurasia that ultimately resulted in the replacement of nearly every local horse lineage.

This expansion marked the rise of widespread horse-based mobility in human history, which refutes the commonly held narrative of large horse herds accompanying the massive migration of steppe peoples across Europe around 3000 BCE and earlier.

Finally, we detect significantly shortened generation times at Botai around 3500 BCE, a settlement from central Asia associated with corrals and a subsistence economy centred on horses. This supports local horse husbandry before the rise of modern domestic bloodlines.

The genetic make-up of modern domestic horses (hereafter, DOM2) emerged in the western Eurasian steppes during the third millennium BCE.

The spread of DOM2 horses, alongside the development of Sintashta spoke-wheeled chariots in Asia (around 2200 to 1800 BCE) and the apparently limited DOM2 genetic influence in Europe before that time, has indicated that long-distance horse-based mobility developed no earlier than the late third millennium BCE.

This chronology implies that the spread of steppe-related ancestry that reshaped the human genetic landscape of nearly all regions of central and western Europe over the course of the third millennium BCE was not driven by DOM2 horseback riding.

Technology.

Shumailov, I., et al (2024) **AI models collapse when trained on recursively generated data.** NATURE 631:doi.org/10.1038/s41586-024-07566-y (available as a free pdf)

[The first generation of AI was trained on human-created text, but subsequent generations of AI are being trained on AI-generated text. Fear the future.]

Authors' abstract: *Stable diffusion revolutionized image creation from descriptive text. GPT-2, GPT-3, and GPT-4 demonstrated high performance across a variety of language tasks. ChatGPT introduced such language models to the public.*

It is now clear that generative artificial intelligence (AI) such as large language models (LLMs) is here to stay and will substantially change the ecosystem of online text and images. Here we consider what may happen to GPT-{n} once LLMs contribute much of the text found online.

We find that indiscriminate use of model-generated content in training causes irreversible defects in the resulting models, in which tails of the original content distribution disappear.

The development of LLMs is very involved and requires large quantities of training data. Yet, although current LLMs2,, including GPT-3, were trained on predominantly human-generated text, this may change.

If the training data of most future models are also scraped from the web, then they will inevitably train on data produced by their predecessors. In this paper, we investigate what happens when text produced by, for example, a version of GPT forms most of the training dataset of following models.

What happens to GPT generations GPT-{n} as n increases? We discover that indiscriminately learning from data produced by other models causes 'model

collapse', a degenerative process whereby, over time, models forget the true underlying data distribution, even in the absence of a shift in the distribution over time.

We give examples of model collapse for GMMs, VAEs and LLMs. We show that, over time, models start losing information about the true distribution, which first starts with tails disappearing, and learned behaviours converge over the generations to a point estimate with very small variance.

Furthermore, we show that this process is inevitable, even for cases with almost ideal conditions for long-term learning, that is, no function estimation error.

We also briefly mention two close concepts to model collapse from the existing literature: catastrophic forgetting arising in the framework of task-free continual learning and data poisoning maliciously leading to unintended behaviour.

Model collapse is a degenerative process affecting generations of learned generative models, in which the data they generate end up polluting the training set of the next generation. Being trained on polluted data, they then mis-perceive reality. We separate two special cases: early model collapse and late model collapse.

In early model collapse, the model begins losing information about the tails of the distribution; in late model collapse, the model converges to a distribution that carries little resemblance to the original one, often with substantially reduced variance.

THIS JUST IN
by Dale Speirs

Every year the post office at Cross Plains, Texas, issues a commemorative postmark for the town's only claim to fame, the residence of Robert E. Howard. In past years they alternated between characters of his works and artifacts associated with him. I send stamped self-addressed envelopes for them.

This year, the honour went to his writing desk. A bit of a comedown but I got to thinking that perhaps whoever holds the licence to REH's works and characters might have been asking too much in the way of a royalty.