

OPUNTIA 412



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.

ABOUT THE COVER: The cover of this issue depicts *Opuntia fragilis f. brachyarthra*. The image comes from CACTUS CULTURE FOR AMATEURS, published in England by W. Watson in 1889, and downloaded from www.gutenberg.org. At that time he was Assistant Curator at the Royal Botanic Gardens in Kew, London.

CHECK MATE
by Dale Speirs

Or cheque mate if you're Canadian. It's been four decades since I last played a game of chess. I played quite a few games in my younger days but my interest faded away after university. The other day I got to thinking about the things I've left behind in my life (I'm now 63) and decided to see what I could find in the way of chess fiction.

Selected issues of THE STRAND MAGAZINE have been scanned as free pdfs and placed on www.archive.org. The selection process is obvious; only the issues that contain the original publications of Sherlock Holmes short stories have been done. However, I also glance over the rest of each issue, and came across an early chess story which takes note of the game's origin in Asia.

"The Black Knight" by Raymund Allen appeared in the 1892 April issue of STRAND. The narrator had met Col. Bradshaw, late of India, at a chess club in London, and was playing a game with him. He opened with a Black Knight Gambit, which prompts Bradshaw to tell him a story about a game he played in India where the black knight was of critical importance.

Bradshaw had been upcountry when he was captured by hostile natives. The tribal chief was a chess fanatic (the game was widely played there) and offered to play Bradshaw. The stakes were high. If Bradshaw won, he would be given safe conduct back to the British lines. If he lost, he would be executed.

The game was presided over by an unfriendly priest. Bradshaw eventually realizes that the priest was using mesmerism to throw the game to the chief. He in his turn tries it, however primitively, to forestall the chief making an illegal move with a black knight. Bradshaw succeeds in forestalling the move, winning his freedom. The priest collapses from the backlash of the mental strain in trying to mesmerize both players. Bradshaw carries away the black knight as a trophy.

The story is the old-fashioned (to us today, but contemporary back then) action-adventure where the pukka sahib carries the field for God, King, and England. An interesting read.



THE SHADOW needs no introduction so I won't give him one. "The Chess Club Murders" is a 1941 episode of the old-time radio series, no writer credits given. (This and other OTR shows are available as free mp3s from www.archive.org.) Lamont Cranston is on the executive of a chess club, which is feuding over whether to stay with their existing but decrepit facility or move to new quarters.

Raymond Packer, newspaper publisher, is one of the opponents to the proposed move. Adjacent to the club building is a giant electrical sign scrolling out news text. Packer has an office in the building with a teletype device that connects to the sign. As Cranston and his companion, Margo Lane, approach the building, they see the sign announcing that the president of the club Judge Harold Walker had just been murdered.

The building is ancient enough to have a cage-lift elevator, which even then was obsolete. It is operated by an elderly Scot named Andy. Packer greets Cranston and Lane (the police haven't arrived yet) and tells him the judge had been shot with a silenced gun. Packer believes another club member named John Lord did it. Unfortunately for Packer, Lord is the second victim, announced by another club member Dr Lathan. So much for that idea.

Cranston later returns as The Shadow and grills Andy to no satisfactory conclusion. He goes over to Walker's house and finds Packer snooping about. Both of them are guilty of breaking and entering, but the end justifies the means. The Shadow wants justice, and Packer wants an exclusive story for his newspaper. They find a mystery novel that Walker had published in his younger days, titled MURDER ON A BET.

Back to the chess club, Packer getting there ahead of Cranston, and becoming the third victim. He had been dictating into a recording machine when he was stabbed from behind, and the recording gives a clue. Much more running back and forth to various places, confirming that the murders were part of a bet. They followed the plot of Walker's book.

The death toll steadily increases, and the chess club's membership steadily decreases. The murderer torches the club building, again following the plot in the novel. Cranston uses the electric sign teletype to send out a message for help and tell the world who the murderer is. The killer dives out the window to his death and so to the organ music and final commercial for the sponsor. A slightly better than average SHADOW. Not great literature but an action-adventure that moves along at a snappy pace.

Cowtown Chess.

I took this photo in 2012 at Century Gardens Park, corner of 8 Street SW and 8 Avenue in the west end of the downtown core. In 2017, the sculpture was removed into storage for the park's complete remodeling. As I type this in May 2018, the park is a giant excavated pit, preparatory to its new look.





At left: Seen regularly in TD Square, an atrium mall connecting several skyscrapers in downtown Calgary. The chess pieces are a fill-in for the display area. Seasonal decorations such as Christmas or Stampede regularly bump them out, but if nothing else is happening, the management put them back in.

Below: Again, a regular fill-in display used by the Central Library branch at the east end of downtown. If it isn't Book Week or History Week (the Calgary Public Library celebrates different events than the rest of the city), then idlers tired of reading books can play a game.

Somebody manufactures these things. There must be a steady demand to justify the cost of production.



BOTANICAL FICTION: PART 10

by Dale Speirs

[Parts 1 to 9 appeared in OPUNTIA's #316, 317, 320, 323, 325, 334, 369, 380, and 402.]

Cozy mysteries have evolved into a standard format from their distant origin in the Miss Marple series. The book titles usually are puns. The main protagonist is an amateur sleuth who busily snoops about contaminating evidence, indirectly obstructing police, and getting into the line of fire from the murderer.

If there is a Website for a particular hobby or interest group, then there is probably a cozy mystery series for it. Gardening is a popular subject for cozies. Where better to dig up a body, or bury one depending on the situation?

Cozy Horticulture.

PUSHING UP DAISIES (2008) by Rosemary Harris is the first novel in a gardening cozy mystery series about Paula Holliday, a Noo Yawk city slicker who wanted to get back to the soil in the worst way and does. She moved to the Connecticut suburb of Springfield and started a landscape business.

Holliday gets the contract to renovate and restore the grounds of a local manor called Halcyon. The property was left to the Springfield Historical Society by two elderly spinsters, Dorothy and Renata Peacock, supposedly sisters. Ten minutes into the job, Holliday digs up a mummified baby. Speculation immediately begins that perhaps one of the Peacock sisters did not die as a virgin.

Holliday continues rehabbing the gardens, and on the side does historical research about the manor and its original occupants. Just to keep the plot ticking along, a rival landscaper is pitchforked in the back in his tree nursery. You know who found the body. To make it worse, the pitchfork has the fingerprints of her gardener on it. He had gone to the nursery earlier in the day to collect money the landscaper owed him. An obvious suspect for the police.

A long-lost Peacock brother shows up, now a grandfather, and ready to help thicken the plot. One of the Peacock women was his sister. The other was her lover, who masqueraded as a sister, it being unsafe to be a lesbian all those decades ago. The baby wasn't from one of them. It was that of a young woman who had received help from the Peacocks, but the baby died shortly after birth.

The father of the baby was still around, and resented Holliday snooping about. It ends up messy, as these cozies usually do, but the loose threads are tied up with an infodump indexed by character. I'm not joking; each character is listed and dealt with in a checklist.

Holliday plants baby's breath (*Gypsophila paniculata*) in the Halcyon garden near where the body was found. A sentimental touch.

FARM FRESH MURDER (2010) by Paige Shelton is the first in a cozy series about Becca Robins, a market gardener who farms near Monson, South Carolina. She converts her small fruits into jams and jellies, and sells them at a local farmers market.

The novel rockets off to a fast start. Matt Simonsen, a new market vendor unknown to Robins, was a peach farmer. He won't get a chance to harvest the rest of his crop. A wildflower vendor named Abner Justen becomes the main suspect to police. Robins barges into the investigation, leaving her fingerprints on a bloody axe and obstructing justice throughout like any good Miss Marple.

Justen had once courted the woman who dumped him and married Simonsen instead. Simonsen's son Jessop may or may not be Abner's son rather than Matt's. Another person of interest is Carl Monroe, a peach vendor who might have resented the competition.

Robins does her sleuthing with all the noise of a spring calf that just spotted a coyote. She gets herself trapped with the murderer, and for once the reader hopes the murderer will succeed. Alas no, for she survives to continue the series.

YEWS WITH CAUTION (2017) by Kate Collins (pseudonym of Linda Tsoutsouris) is part of a long-running cozy mystery series about flower shop owner Abby Knight and her husband Marco Salvare, a private detective. I reviewed an earlier novel in this series, SLEEPING WITH ANEMONE, in OPUNTIA #403.

This installment begins with Knight and her husband shopping at a local tree nursery for shrubs to plant around their new house. The service is terrible, mainly because the owner Dick Kennison seems to have disappeared. Matters were not helped when Knight got lost in an old yew maze, and almost fell down an open well that was emitting a powerful stench of decay.

But tomorrow is another day, and back at her store, the Bloomers Flower Shop, life seems sunnier. Not so to others who knew and heartily disliked Kennison. He had been diddling another man's wife and was involved in sharp practice elsewhere. More and more suspects become entangled.

Knight's amateur sleuthing doesn't help either. Kennison's disappearance becomes increasingly suspicious but Knight doesn't think to mention the open well to police. Various people, including Marco, are poisoned by unknown causes, one of them fatally. They had a single event in common, having bought yews from Kennison's nursery.

Kennison had a secret pact with an agrochemical company to test a new and very toxic pesticide in his garden centre. I don't believe it. My BSc is in Horticulture and before moving to Calgary and joining the Parks Dept., I was involved in pesticide research at the provincial Ministry of Agriculture and my alma mater the University of Alberta. I did some of the earliest trials of Roundup in Canada back in the 1970s, long before the public heard of it.

No pesticide company would do the testing as described in this novel. Firstly, it wasn't done to standard scientific protocols that every company uses to prove their data. Secondly, no company would use a garden centre for testing. Such tests were done on experimental farms such as the ones I worked at or research laboratories, private or public.

Kennison's body is never found because he had faked his death for good and sufficient reason. As is typical in cozies, Knight gets herself trapped by the killer, almost dies, and the usual etcetera. The ending has multiple twists, some of them a little too elaborate to be believable.

Cozy Gardening In The District Of Columbia.

Long ago, Margaret Truman wrote a series of murder mysteries, still in print, set in Washington, D.C., using her inside knowledge as the daughter of a President. She started something. In modern times, there have been several cozy series about staff members who work in the White House and trip over more bodies in a year than Jessica Fletcher. Not very plausible, but for cozy lovers the suspension of disbelief is easy.

FLOWERBED OF STATE (2011) began a new cozy gardening series by Dorothy St. James about Cassandra Calhoun, assistant gardener at the White

House. Considering all the Miss Marples working there, the combined death toll must make Iraq look like a walk in the park, if you'll pardon the expression. Calhoun isn't long on the job before she finds a woman's body, strangled and stuffed into a park garbage bin.

The murdered woman was a U.S. Treasury investigator enquiring into a banking scandal. Assorted politics intervene in a town where everyone's first thought is to get ahead at the expense of other bureaucrats. Calhoun had been brought in by the First Lady to initiate organic and sustainable gardening methods for the White House grounds. That in itself stirs up trouble in a place where rose bushes are treated like annuals, and replanted every spring with greenhouse roses already forced into bloom.



The plot is mundane, with many alarms and excursions, helped along by lack of disclosure to the reader. Some of them are caused by the murderer wanting to suffocate both Calhoun and the exposure of his banking affairs.

Calhoun is not the most diplomatic person, whether sleuthing or arguing about floribunda roses, which were a third-rail topic around the White House. An average read, and a rough start to the cozy series.

A bit better is the second novel in the series, THE SCARLET PEPPER (2012). Calhoun has somehow managed to hang on to her job as official organic gardener at the White House. Now she's having trouble because someone sabotaged the vegetable garden. The peppers are coming up as red cultivars instead of green, and cabbage was sown where the lettuce was to be.

Not so incidently, an investigative reporter named Griffon Parker was found dead in the park. He had been poisoned by yew leaves in his tea, so Calhoun becomes a suspect. He had been annoying her with scandalous accusations, although his main attack was on the President's Chief of Staff. Another problem she has is Gillis Farquhar, a garden television show host who is trying to insinuate himself into the gardening staff.

Then there was the unfortunate incident of the bags of ammonium nitrate fertilizer that panicked the Secret Service into a bomb alert. Ammonium nitrate soaked with diesel fuel becomes a crude form of TNT. It is widely used in the mining industry as a cheap explosive for blasting.

Other reporters are murdered, and the death toll climbs. Everyone is running around like headless chickens, which some people would say in normal at the White House. Calhoun fingers the culprit, a woman who had way too many personal problems. There is the usual last-second excitement, some of it involving the fertilizer. Farquahar turns out to be innocent. The publicity pushes his gardening book to the top of the bestseller list.

Calhoun keeps her job, and the smarter Secret Service agents brace themselves for what will happen in the next novel. A word to the wise: don't buy ammonium nitrate fertilizer on your credit card. It may put you on a watch list.

OAK AND DAGGER (2013) is full of MacGiffins, from historical documents missing out of the White House curator's office to the possibility of buried treasure in the South Lawn.

The novel opens with a flashback to the War of 1812 when the British were about to occupy and burn Washington, D.C., and First Lady Dolley Madison was preparing to flee the White House. She is worried by what is referred to as Jefferson's treasure, but the gardener tells her he will bury it on the grounds for safety.

Flashing forward two centuries, the curator Frida Collinsworth and the chief horticulturist Gordon Sims are feuding about the treasure. She thinks he stole papers from her that would divulge the location because he wanted the gardening staff to have the glory. That argument lands Sims in deep trouble when Collinsworth is murdered and he becomes the prime suspect.

Cassandra Calhoun once again goes sleuthing in order to protect the honour of the gardening staff. The murder had to be an inside job among the White House staff. Suspicion is scattered about like fertilizer. Several subplots play out, all of them revolving around the lawns.

Everyone is searching for the treasure. It turns out to be seeds from Jefferson's garden, and not buried where everyone thought it would be. After two centuries, the seeds are inert. The murderer's activities were in vain. The buried treasure

for which he would kill was worthless. On the bloody morning after, one tin soldier rides away.

Ann Ripley authored a gardening cozy mystery series about Louise Eldridge, who single-handedly drove up the murder rate in Sylvan Valley, Virginia, not far from the District of Columbia. She has a gardening show on public television, which by all rights should be a true crimes show.

DEATH OF A POLITICAL PLANT (1998) has Eldridge plagued by household guests who are as pestiferous as any fungus gnat or nematode. A small child of her visiting cousin does more damage in her garden than any nor'easter.

The Perennial Plant Society convention is in town, three executives of which are bestowing "Plant Person Of The Year" upon her, and also telling her how she should maintain her garden, starting with cutting down her favourite trees. Eldridge is under pressure to use her television show to endorse the President's new environmental protection legislation.

Worst of all, a past lover of hers, Jay McCormick, is in town. He is an investigative journalist. What he was investigating won't be known after his corpse is found floating in an ornamental garden pond. Not Eldridge's pond fortunately, but that of her neighbour. As if her garden wasn't already badly trampled by rotten little kids, a masked intruder wipes out some more of her flowers while attempting to breach her household in search of something.

Eldridge does her sleuthing while constantly fending off a multitude of distractions from people who want a piece of her time. The motives of most of the suspects, unlike many cozies, are ambition and greed for political power. Television executives want to change Eldridge's gardening show into an environmental casuistry. Political advisors are lurking about, scheming like the little so-and-so types they are around the world.

The MacGuffin of the plot is a computer floppy disk (this is a 1998 book, remember) that was McCormick's backup copy of an expose he was working on at the time of his death. Normally the denouement of a cozy is Miss Marple trapped with the killer, but this one reverses it. The three PPS biddies come back to give Eldridge more advice and help her catch the killer in the act. They overpower him by force of numbers and hogtie him with duct tape.

Case solved. The chapters are interspersed with sidebars on gardening tips. If someone falls into a water garden, then before the next chapter begins there are a few pages on how to maintain a pond. The novel was a fair read but seemed too cluttered with too many subplots and characters.

THE CHRISTMAS GARDEN AFFAIR (2002) puts Eldridge in trouble because the ratings of her show are plummeting against a rival series “Bunny In The Garden”. Her competitor is Bunny Bainfield, who wears short-shorts and displays considerable cleavage on her show.

The series was undoubtedly popular with men who don’t really care about pruning or rooting cuttings, and with lesbians, one of whom is her assistant Peg Roggenstach. Bunny doesn’t swing that way, as she prefers elderly millionaires with heart conditions and wills written in her favour, but she does like to tease Roggenstach by stretching or bending for maximum effect.

The First Lady has invited both Eldridge and Bainfield to a conference on native plants for use in gardens. Introduced into the plot at this point is a USDA bureaucrat who resents both the First Lady and Bainfield barging onto his turf (pardon the pun).

Bainfield wants to use genetic engineering on native species to make them a good item for her nursery business, with bigger flowers and deeper fragrance. She has also stepped on many toes of her rivals in the business, and when it comes to suspects, the line forms to the right.

The conference includes a formal ball that few will forget. At the head table, Bainfield quaffs a glass of poisoned wine that sends her into the next world and greatly embarrasses the First Lady. Eldridge is a suspect naturally, and goes snooping in self-defence while trying to avoid the attentions of the Secret Service. A second murder, not blamed on Eldridge, takes out another gardening expert who was next in line to succeed Bainfield in the television ratings.

Roggenstach was not her real name. She was an ex-Stasi who fled East Germany after the Berlin Wall came down. Other suspects appear like sprouts in bare soil after a good rain. Eldridge and the police cross paths as they try to weed out the plentitude of suspects.

The murderer was an orchid grower who was a British ex-spy. Bainfield had an indirect connection with him, and died only because she was inconvenient to his

plans to rule the gardening world. The motive for the murders seem implausible. By the end of the book Bainfield’s death had become a sideshow.

SUMMER GARDEN MURDER (2005) is another installment in the series. It gets off to an ugly start for Eldridge at a party where she meets all the wrong sort of people.

The first is a murderer she helped arrest several years ago, Peter Hoffman, who copped an insanity plea and is now free after four years in an insane asylum. Mike Cunningham, the lawyer who got him off, makes a crude pass at her. The two men are now involved in arms dealing.

Eldridge and her family decide on a vacation to get away from Hoffman, but it doesn’t work. Upon returning home, she finds that Hoffman has been planted underneath one of her azalea bushes. Being Suspect #1 is bad enough while trying to carry on a normal life, but becomes worse when Cunningham is the second corpse, also buried in her backyard.

The murderer turned out to be the least noted character, who wanted revenge because Hoffman had killed the murderer’s sister. Because by her snooping Eldridge had botched up the prosecutor’s attempt to get the death penalty, she now learns that amateur sleuthing has serious consequences.

As per usual in cozies, Eldridge gets trapped by the murderer, as indeed she was in the preceding novels. Her escape is unique. Eldridge runs for it, with the murderer in hot pursuit one step behind. She heads straight for a hawthorn, swerves at the last second, and causes the murderer to run headlong into the hawthorn. They have thorns 3 to 5 cm long (at least the ones in Calgary do). Slamming into one of them at full speed leaves the murderer helpless with the pain of a thousand cuts.

And so to justice and the tying up of loose threads via infodumps. The book finishes off with some gardening tips about volunteer plants.

Having run up the death toll in Sylvan Valley to Cabot Cove proportions, Eldridge does the same thing Jessica Fletcher did and goes traveling, the better to spread out the bodies. DEATH IN THE ORCHID GARDEN (2006) takes place in Hawaii, where Eldridge has gone to the island of Kauai to film some episodes of her gardening show.

The hotel she is staying at is hosting a botanical conference, at which a number of plant hunters are attending. Most are looking for new species for the garden, and one has been hunting plants that may have pharmacological uses. It is a competitive business. Too competitive, as Eldridge finds the body of one collector at the base of a cliff. Did he fall by accident or was he pushed?

Filming episode segments in a botanical paradise is a busy job for Eldridge. The hotel guests are openly suspicious of her, for bad news travels fast and not a few people heard the stories about Sylvan Valley. So have the local police, who don't like amateur sleuths any more than the mainland police.

The second victim dies in a uniquely Hawaiian way, by falling into flowing lava. Did he fall or was he pushed? He had a pair of ambitious underlings who wanted to take over his botanicals company. One of them blabs all to the other while Eldridge eavesdrops from behind tropical shrubbery.

Once more she is trapped with the murderer and is saved by random luck. Doesn't that woman ever learn? Fortunately for the good citizens of Hawaii, she heads back home to Virginia.

WORLD WIDE PARTY ON JUNE 21

Founded by Benoit Girard (Quebec) and Franz Miklis (Austria) in 1994, the World Wide Party is held on June 21st every year. 2018 will be the 25th year of the WWP.

At 21h00 local time, everyone is invited to raise a glass and toast fellow members of the Papernet around the world. It is important to have it exactly at 21h00 your time. The idea is to get a wave of fellowship circling the planet. Rescheduling it to a club meeting or more convenient time negates the idea of a wave of celebration by SF fans and zinesters circling the globe.

At 21h00, face to the east and salute those who have already celebrated. Then face north, then south, and toast those in your time zone who are celebrating as you do. Finally, face west and raise a glass to those who will celebrate WWP in the next hour. Raise a glass, publish a one-shot, have a party, or do a mail art project for the WWP. Let me know how you celebrated the day.

MATTHEW 24:6: PART 4

by Dale Speirs

[Parts 1to 3 appeared in OPUNTIA's #389, 391, and 392.]

Planning For Disaster.

BARNEY MILLER was a television sitcom broadcast from 1975 to 1982 and still available on DVD. It was about the 12th Precinct Detective Squad, housed on the second floor of a ramshackle NYPD building in Greenwich Village, Manhattan. Capt Miller had about a half-dozen detectives under his command. The episodes seldom left the squad room and the series was essentially a stage play filmed before a live audience.

One of Miller's men was Sgt Stanley "Wojo" Wojciehowicz, young and impetuous. (A running gag through the series was his indignation at people mis-spelling his name. "*It's simple, just spell it the way it sounds*", he would lecture them.)

In the third season episode "Evacuation" (1976), written by Danny Arnold, Wojciehowicz is temporarily assigned to a public relations office in the NYPD. While browsing through the files there, he comes across the Grey Book, an outdated and long-forgotten procedures manual on what to do if New York City had to be evacuated. He takes it at face value though, and inadvertently triggers a panic in Manhattan. It happens that heavy rain was falling, and a hurricane watch was in place.

Wojciehowicz stops by the 12th Precinct with the Grey Book and points out to Miller that it is impossible to evacuate Manhattan in the event of disaster. He is overheard by a despatch rider, one of the worst gossips in the NYPD, who departs and begins spreading the garbled news that the city is doomed. Politicians at City Hall make a run for it, which only legitimizes the rumours.

Deputy Inspector Frank Luger, Miller's commanding officer, drops by in a dither. Miller was prepared to disregard the rumours, but the news that the big boys are fleeing shakes his confidence. He and Luger sit down with the Grey Book and go through it. To their dismay, it is obsolete, referring to civil defence organizations that were done away with by budget cuts years ago, and laughable procedures such as how to direct the refugee traffic on the streets.

Miller remarks that he isn't sure what the new official procedure would be. *"Every man for himself"*, mutters Luger as he pages through the book. Miller has to agree. The uniformed officers who have the floor below the Detective Squad are anxiously awaiting confirmation about the bad news, hoping to pick up some overtime pay. Eventually the rumours are quashed, and the panic subsides.

The episode is funny because it's true. Moving 11 million New Yorkers out of the city is not just impractical, it is impossible. Sheltering in place is the only possibility. Supposing that the city was somehow evacuated in time, adjacent areas couldn't possibly provide food and shelter to that many refugees in such a short time. Most disaster movies make a stab at understanding this, although there are too many that depict Los Angeles being evacuated in two days.

Not With A Bang But A Whimper.

"The Night Wire" is a 1926 story by H.F. Arnold reprinted in the 2011 anthology THE WEIRD, edited by Ann and Jeff VanderMeer. The scene is the night shift at a city newspaper office, where the rewrite men check the teletypes for any interesting stories.

One item coming through is a series of despatches from a town called Xebico. A fog has begun creeping over it, not just killing people but consuming them. Bit by bit, the despatches build up the story, as the news reporter at the other end sends his information with increasing horror. The fog is spreading relentlessly. Then the teletype cuts off.

Not With A Bang But A Guffaw.

THIS IS THE END (2013), written by Seth Rogan and Evan Goldberg, is a coarse comedy about Armageddon in Los Angeles. It begins slowly with a bunch of young actors, playing themselves, at a wild house party. The setup is tedious as the characters are introduced and all the back stories shoveled in. Lots of toilet humour and swearing, because the teenaged audience at which the movie was aimed think it funny. Having said that, it was interesting how the portrayal of events predicted in the Book of Revelation were done.

These are they which came out of great tribulation, and have washed their robes, and made them white in the blood of the Lamb.

The two lead actors are in a convenience store when the Rapture takes place, sucking up several customers into Heaven in beams of blue light. The store clerk, who a moment before had snarled at some customers, immediately recognizes what happened and cries out in anguish because she wasn't one of the chosen. A split second later, the earthquakes begin and she is crushed under falling debris.

There was a great earthquake; and the sun became black as sackcloth of hair, and the moon became as blood.

Chaos descends on the city, and presumably the rest of the world, although it is not shown. Communications go down immediately. Television only lasts briefly and the Internet crashed at the first earthquake. Strangely, for most of the movie the survivors have electricity in their house, and only near the end does it fail.

And when he had opened the seventh seal, there was silence in heaven about the space of half an hour.

The young actors partying inside the mansion aren't paying attention to what is going on in the outside world. They've been drinking, toking, and sniffing, and therefore reasonably assume that the events outside are hallucinogenic. So far, so good.

And he opened the bottomless pit; and there arose a smoke out of the pit, as the smoke of a great furnace; and the sun and the air were darkened by reason of the smoke of the pit.

When the earthquakes shake the house, they flee outside onto the front lawn, about the size of a football field. Giant sinkholes and crevasses are opening up, with glowing magma deep down. The majority of the partygoers fall in, thus reducing the cast list in a hurry and making it easier to keep track of the survivors. The city is lit up by countless burning fires.

The survivors barricade themselves inside the mansion. Being actors, they are totally useless at everyday skills. When a concrete wall cracks, they duct tape it. They carefully collect the remaining food, all of it junk food and booze. You'll need to use the fast-forward button quite a bit, as most of the comedy routines go on about three minutes too long.

The beast that ascendeth out of the bottomless pit shall make war against them, and shall overcome them, and kill them.

A nice touch is that it is uncertain until near the end of the movie as to whether Armageddon has arrived or aliens are invading. One of the characters is possessed and looks like a zombie. The matter is resolved when the demons arrive, as described in the Bible. The beasts of Revelation stalk the burning city, snapping up the few remaining humans.

Let us be glad and rejoice.

The story line makes it evident that it is indeed Armageddon. The grand finale is the arrival of the saved ones in Heaven, where they promptly put on a glee club dance number.

The movie would have been better had it been edited a bit more. Scenes go on and on until the joke has been beaten into a bloody pulp. Nonetheless, it is a different look at Revelation, certainly not a movie that would have been made by Faith Films or Asylum. Worth watching once.

TRANSIT FANNING IN CALGARY: PART 23

by Dale Speirs

[Parts 1 to 22 appeared in OPUNTIA's #256, 258, 260, 264, 269, 275, 283, 298, 302, 327, 333, 341, 348, 357, 359, 365, 369, 371, 392, 394, 396, and 407.]

Gridlock.

“Report From The Near Future: Crystallization” by David Gerrold (2006, from the anthology ELEMENTAL, edited by Steven Savile and Alethea Kontis) is an entirely plausible story of freeway gridlock destroying Los Angeles. It began on a secondary street with a traffic accident that backed up commuter traffic on an intersecting freeway. A chain reaction of stopped vehicles develops, and soon a million vehicles are sitting idling.

From there, the logical consequences spread. Road rage fights, overheated engine fires, and abandoned cars. The subway system is soon overloaded. The gridlock shuts down the supply of food to the city, all of which is delivered by truck. Refugees begin fleeing the city, which overwhelms adjacent cities. A million abandoned cars cannot be towed away in a week or a month. Angelenos have no choice but to learn how to walk or ride a bicycle.

A situation made for public transit, except the buses can’t get through the clogged streets. The only other fiction I have read on the subject is the novel GRIDLOCK by Ben Elton, which I reviewed in OPUNTIA #269.

Switching to real life, Gerrold’s story struck a note with me because during the great flood of June 2013 the same thing happened to Calgary. (See OPUNTIA's #264 to 267.) The Bow River and the Elbow River dissect the city into several quadrants, normally something Calgarians didn’t notice.

The rivers rose 5 metres high on June 21st, washing over the decks of the bridges. Only two bridges were open on the Bow River, one in the northwest and one in the southeast. All the bridges on the Elbow River were under water.

I can see the Crowchild Trail freeway from my house. On the day, I looked out and saw traffic stopped. Nothing unusual, because it is always slow moving during rush hour. Several hours later, I looked out again and recognized the same trucks and cars, still sitting there. They hadn’t moved one centimetre. Nor did they by sunset. It was the first time Calgary had experienced gridlock across the city.

The lucky ones who were on the side of the river they needed to be were able to eventually exit onto a side street and work their way home through residential neighbourhoods. Buses could only operate within a segment of their routes. Anyone who had to go crosstown to get home or to work was out of luck.

The Convenient Way.

Calgary’s suburbs sprawl endlessly and yet it is a concentrated city in many respects. It has a centralized government (there are no metro governments in Alberta) and about one-third of working Calgarians commute to the downtown core. Consequently the transit system is set up as a hub-and-spoke system. If you live in one suburb and work in another suburb, a car is a necessity.

I have always used the transit system to go downtown, parking being scarce and far more expensive than the cost of a monthly bus pass. After I retired in 2010, one thing I had to learn how to do was to slow down and not worry about rushing around town. As a result, I take the bus and train considerably more often than before.

Which brings me to this photo. The Calgary Comic Expo, paid attendance about 60,000, came to town on the last weekend of April. It was held at the Stampede rodeo grounds, which is serviced by two LRT stations and a dozen bus routes. Parking may be scarce downtown, but at the rodeo you need to take out a mortgage to park.

It was therefore not surprising to see cosplayers along the LRT lines. I was on an errand heading into what we call Deep South Calgary when I noticed this woman going in the opposite direction to the Expo. She was delighted to pose for me on the platform at the Chinook LRT station.

I saw a few other cosplayers using the trains but wasn't able to get my smartphone camera out in time. It shows you how far out of touch I am with modern media SF that I had no idea what superheroes they were dressed as. Still far too many cosplayers wearing sneakers with their costumes.

On The Buses.

Budget cuts at Calgary Transit. On lesser-used routes, they are switching to shuttle buses such as this one. They are built on 1-tonne truck chassises and ride like buckboards.



STEAMPUNK REVIEWS: PART 3

by Dale Speirs

[Parts 1 to 2 appeared in OPUNTIA's #364 and 393.]

AGATHA H. AND THE AIRSHIP CITY (2011) by Phil and Kaja Foglio is the first volume in a humorous series about a clockwork world where the Industrial Revolution made a sudden lefthand turn without signaling. Europe is under the domination of the Sparks, a collective term for mad scientists bwah-ha-ha-ing with their assorted devices to rule the world, or at least one of the postage-stamp principalities.

Someone has been destroying the Sparks one by one. The Heterodyne Boys go after them but vanish, and haven't been seen in sixteen years. They have become a legend among the peasantry.

Jump cut to Agatha Clay, a student at Transylvania Polygnostic University, and quite inept at experimental work. If she's lucky, she'll get a job as a bottle washer in someone's laboratory. Baron Klaus Wulfenbach and his clockwork soldiers occupy TPU, taking it over from the resident mad scientist Dr Beetle. After various episodes, Agatha becomes a prisoner of Wulfenbach, a hostage to be put to work in his laboratories.

Lots of adventures, Europe being a patchwork of warlords and Sparks. Wulfenbach has learned from experience that castles can be destroyed, so he has a fleet of airships. Eventually Agatha learns she was adopted. She is not only the last living member of the Heterodyne family but has the potential to become a Sparks. Her saga begins, to be continued in future novels. A funny read, if somewhat noisy at times.

THE FALLING MACHINE (2011) by Andrew P. Mayer is the first volume of the Society of Steam series. Set in the 1880s, it is a world where New York City is gifted with a group of gentlemen superheroes called the Paragons. They use clockwork and steam gadgets, not superpowers. 19-year-old Sarah Stanton would like to be one of them. When their leader is murdered, she tries to investigate, assisted by a clockwork man called Automaton, or Tom for short. The Children of Eschaton are a rival group out to change the world.

The novel opens briskly with a battle on top of the Brooklyn Bridge cable towers, when the bridge was still under construction. Introduced are characters

such as Bomb Lance and Doc Dynamite (Eschaton, and therefore bad guys by definition) and the Industrialist (Sarah's father Alexander, and therefore a good guy by definition).

From there is a sidetrack into both the visible and invisible parts of the steampunk world. Ostensibly Sarah is learning about that which she will soon inherit, but it also informs the reader without too many blatant infodumps.

The secret energy source for all the Paragon gadgets is "fortified steam". From the description of the devices Sarah is shown, the reader will deduce that it is gaseous radioactive material. The fortified steam in small amounts is a point source that can power hand-carried devices or automatons. In larger amounts it will run a generator that can light up a city.

Someone wants the Alpha Element that generates the fortified steam. With the death of their leader, the Paragons squabble among themselves, jockeying for position. That someone is Lord Eschaton, who wants to build a better and brighter tomorrow based on scientific principles. Sarah is working out her own suffragette motives and trying to become a superhero by herself.

The final chapter ends with a battle almost to the death, with Sarah in the thick of it. Since this novel is only the first in a series, the battle ends indecisively with little of the plot resolved. To be continued.

As indeed it was in HEARTS OF SMOKE AND STEAM (2011). The Automaton was destroyed but Sarah salvaged its mechanical heart, the source of the fortified steam. Lord Eschaton needs it and his minions are working to fulfill his desires.

Entering the plot is Emilio Armando, an inventor who adds in a romantic subplot. The Paragons have been whittled down to four survivors, including Sarah's father. An outsider superhero Anubis is introduced as an enemy of Lord Eschaton, who has given up on the Paragons and will carry forward his own plans.

The novel opens humorously as the Paragons audition new members, there being job vacancies galore. Hydraulic Man has artificial snake heads that play on the theme of Hydra, which Alexander points out is a bit of a stretch. Each head spits out a different poison, acid, or Greek fire as the case may be. They tell him they'll be in touch. Very politely, not wishing to antagonize a man

carrying on his back high-pressure canisters of fuel and acid.

Sarah has her own troubles trying to fight Eschaton, both the Lord and the Children. She has to defend herself while trying to live off her own money. The final battle, at least for this volume, is on a theatre stage. There is a full cast of superheroes, including a new steam man. The counterpoint is an indignant stagehand who wants to know who will pay for the repairs to the building. Lumber isn't cheap.

Around Cowtown.

The poster at right is funnier if you know the tower is the Calgary Tower. When it was completed in 1968, it was the tallest structure in Alberta. Today it is almost completely obscured by skyscrapers surrounding it.

WEIRD FICTION

by Dale Speirs

If Wishes Were Horses And Beggars Could Ride.

THE WEIRD CIRCLE was an old-time radio series whose type of fiction is obvious from the title. (This and other OTR shows are available as free mp3s from www.archive.org.) “The Black Parchment” is a 1945 episode (and the final one of the series) set in not-so-gay Paris. Neither writers nor the cast were given credits in this series.

Raphael Roland is a reckless young man who gambles away a fortune. He loses his fiancée after spending his last franc on a lottery ticket. He comes into possession of a black parchment document which has the power to grant any wish he makes. The catch, and there always is one, is that each time he makes a wish, he ages and the parchment shrinks. After the final wish, he will die and the parchment will vanish.



His first wish is for 7 million francs, made as his landlady is haranguing him for the rent. He wins the national lottery on that ticket he had bought with his last franc, but the parchment suddenly shrinks from tablecloth size to doormat size. He wishes that he could reconcile with his fiancée, and does, but the parchment shrinks again. He suddenly realizes that he has to be careful, for he is looking visibly older after each wish. A young woman may still love a rich old man, but Roland would rather be rich and young.

After the plot has rung out all the changes, his fiancée falls ill. He loves her deeply but knows his next wish will kill him and vanish the parchment. He does it anyway. Not really a twist ending, but one that redeems him after being such a scoundrel. A nice variation on the Dorian Gray theme.

Foaming At The Mouth.

MYSTERY IN THE AIR was a late 1940s radio series starring Peter Lorre in a wide variety of roles. He was unmatched for his ability to portray madmen toppling over the edge into hysterical screaming and ranting. In the studio, he so overpowered everyone else that he had his own microphone, while the rest of the cast assembled at a safe distance around a second mike.

The 1947 episode “The Queen Of Spades”, based on a story by Alexander Pushkin, has Lorre playing the part of Lieutenant Hermann, a man who descends into insanity over the card game of faro. He learns that an elderly Countess has the secret to always winning in faro, using a combination of three cards that never loses.

In trying to force the Countess to reveal the winning combination, he inadvertently kills her but fails to get the numbers. It is assumed the old lady died of natural causes, and Hermann even attends her funeral. While paying his respects at the open casket, he faints when her corpse winks at him.

Still later, he is haunted by her ghost, but convinces it to give him the combination. She tells him to play 3, 7, and 8, doubling down after each bet. He wins the first bet but loses his fortune on the second bet and is bankrupted. The ghost lied to him.

A very melodramatic episode, as indeed most of them are. You will have to keep adjusting the volume control as Lorre comes in and out of his scenes. He never played them by halves.

Quiet Terror.

DARK FANTASY was an old-time radio series that had a short life of 31 episodes during the 1941-42 season. Unusually for network OTR, it was produced in Oklahoma City. All episodes were written by Scott Bishop. Like much fantasy, logic was not a strong suit. The emphasis was on the atmosphere and sound effects of the story. The sound quality of the mp3s is excellent.

As an example, the 1942 episode “The Man With The Scarlet Satchel” is about Philip Craig, an elderly millionaire slowly being poisoned by his nurse, and duped into signing papers that left his estate to his lawyer, there being no other family. The two co-conspirators succeed in making his death look natural, and all they need to do is to wait out the probate.

Craig had been dabbling in his own private laboratory during his lucid periods, doing who knows what with electricity and chemicals. He specified in his will that a box of modeling clay was to be placed in his coffin, which in turn was interred in the family tomb.

The nurse is the first to go. A few days after his death, he appears at her apartment carrying a scarlet satchel. He sets it down, opens it, and invites her to look inside. She is already at the edge from seeing a dead man rise from the grave, and the final shock kills her.

The lawyer and a friend investigate the laboratory after the incident. They find an empty box, the one that had contained the clay. Scattered about on a workbench are scraps of very fine copper wire. From there, they hustle to the tomb, to verify if the box was indeed the one that was supposed to be in the coffin. It isn't, and neither is the body.

Craig's animated corpse appears, carrying the satchel. He accuses the lawyer of murdering him, and then opens the satchel. Out steps a miniature clay version of the nurse, who terrifies the lawyer unto death. Cue the orchestral music and end credits.

The pace of the episode is deliberately slow. Characters speak at a measured pace, clearly enunciating each word. The suspension builds up as the listener waits for something to happen, as it eventually does. A good episode in a good OTR series.

A similar type of OTR series was QUIET PLEASE, which ran 1947 to 1949. All of the episodes were written by the director Wyllis Cooper. Unfortunately the sound quality of the mp3s is often poor, based on air checks taped off the radio instead of the original transcribed disks.

The first episode in the series was “Nothing Behind The Door”. It begins with a couple of bank robbers taking the tour of the Wilson Observatory to while away the time before their next heist. They notice an abandoned building off on an obscure corner, yet it is fenced and strongly padlocked. When they ask the tour guide what is inside it, he says simply that there is nothing in it.

This piques their interest, as they are looking for a getaway hiding place, so they decide to use it. That night, after the robbery, they arrive with the loot to settle down inside. The fence is easy to surmount and they quickly pop the padlock on the door. One of them goes inside to check it out first, and the rest was silence. When he doesn’t respond to the rest of the gang, they go in one by one and vanish silently in the same way.

The last one realizes that when the guard said nothing was inside, he meant nothing as in empty space. Where the robbers are gone, no one knows, for there is nothing there to search. It is a void that absorbs all.

Episode #4 in QUIET PLEASE was “The Ticket Taker”. Three hit men, Ernie (the narrator), Rubey, and Jock, came into Chicago to take out a mob leader named Gaffney. The job went very well, they’ve been paid, and now they’re hiding out until it is safe to leave town. The beauty of it was that Gaffney had an enemy named DeeDee who had been loud-mouthing all over town that he was going to kill him. Cheap talk, but it comes back to haunt DeeDee when the gang takes its revenge and kills him a few days later, leaving the hit men free and clear. Even the police are satisfied that justice was served.

The hit men draw cards to see who leaves town first, and Rubey wins. On his way to his flight, escorted by the other two, he meets an old man in a long overcoat, shuffling along. The geezer asks him for his ticket, not the plane ticket, but a different one. Rubey finds one in his pocket he didn’t know was there. Surprised and off his guard, he lets the ticket taker punch it, then both go their own way.

Ernie and Jock wait a day, long enough to buy a newspaper and learn that Rubey’s flight had crashed on takeoff with no survivors. They pish-posh that

there was any connection between the ticket taker and the crash, but just the same, Jock decides to take the bus out of town instead of flying.

The ticket taker reappears. Jock decides to cross him up by switching buses, but never makes it out of the station. He tripped and fell under a bus driving past. These things happen, but Ernie isn’t convinced. As they say in the army, once is random chance, twice is coincidence, and three times is enemy action.

Ernie is paranoid and shoots the ticket taker. The old man vanishes into thin air, and the shots hit harmlessly against the far wall. The police come running, but the best they can do is run Ernie in for thirty days on unlawful discharge of a firearm. When he gets out, the ticket taker finds him and hands him a ticket, telling Ernie that he’ll be back to punch it when he leaves town.

Ernie is terrified to do any traveling. He knows what will happen if he does. Fade to the end credits.

Ghost Stories.

INNER SANCTUM MYSTERIES was one of the most successful old-time radio series ever, with 527 episodes aired between 1941 and 1952. The episodes, were introduced by a genial host named Raymond, who delighted in ghoulish puns.

Each episode opened with the sound of a creaking door, the trademark of the show. Raymond would warmly welcome the listener and invite him to step into the inner sanctum, but be careful not to slip in the splash of blood on the floor. ISM is not for the squeamish. Always good fun for campy mysteries, the kind where only one survivor makes it to the end.

“Between Two Worlds” was a 1948 episode written by John Roeburt, a regular writer on the series. It is about a loser named Sam who, as the episode begins, is about to be executed by a gangster. Sam regrets that he has never done one good deed in his life and wishes fervently that he could have been a better man than he was. The gangster empties his gun into Sam but nothing happens; the bullets disappear en route. The gangster is then choked to death by invisible hands.

Sam flees on a train, where a ghost approaches him and says that Sam is living on borrowed time. The ghost is trapped between two dimensions but will be

released into eternal peace if Sam will do a good deed as instructed. That turns out to be marrying the ghost's daughter Constance.

Except that she isn't the daughter but a ringer named Ann. The ghost's brother had murdered Constance and substituted the imposter as a plan to eventually get his hands on a sizeable inheritance. The ghost kills his brother, leaving Sam and Ann eyeing each other with a wild surmise. She has a gun and uses it, but again Sam doesn't die. She, on the other hand, is killed by the ghost. The death is considered a fatal heart attack, leaving Sam as the last person standing.

On that point, the story abruptly stops, leaving all the loose threads dangling. The host of the show comes in with a few more ghoulish puns, and so to the closing. Worth listening to once if you like ghost stories.

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: Lloyd Penney
Etobicoke, Ontario

2018-04-30

OPUNTIA #409: [re: city wildlife] I believe there are species of hares around Toronto, but as you might expect, they are rarely seen. The mallards and Canada geese are making themselves known here, and the squirrels, both black and grey, have been running around here all winter, anyway. Now that it is finally hinting of spring around here, there's the odd robin, but more, there are plenty of red-winged blackbirds calling to each other. Clouds of gnats are a pain, but they are here as another sign of spring.

[Come to think of it, I haven't seen any robins yet in Calgary as of the date of your letter. Lots of other birds busily chirping their heads off as the mating season begins.]

Easter came and went, but even with Laura Secord and Purdy's around here and there, we didn't have a scrap of chocolate or candy. Our clothes are tight enough as it is.

The World Wide Party is on our schedule, and it may be a little quiet, for it takes place on a Monday this year. Oh, well, as long as we celebrate and observe.

OPUNTIA #410: That Lovecraft Hopped Whiskey poster should be on a t-shirt. The detail would make it perfect. It is a reminder that, as with the old World Fantasy trophies, that Howard Lovecraft was not a handsome guy. I have never gotten into the literature of Lovecraft, Merritt and others who are squamous, eldritch, or something in between.

[There is a flood of Lovecraft pastiches coming onto the market now that all his works are in the public domain. I have more reviews in progress.]

Telephone stories: I think there must be something in the Hardy Boys series, or other similar kids' books, about telephone adventures, but I do remember a couple of episodes of the Twilight Zone, especially one written by Richard Matheson.

[The Hardy Boys series began in 1927, so by that time the telephone was passe as an exciting new gadget. I occasionally run a search on the Gutenberg Project for more scans of the old telephone action-adventures but they are scarce.]

I have some work coming up with the local company that supplies registration staff to trade shows and conferences, so I am hoping it will tide me over until something more full-time comes along. Then, we have a number of steampunk shows coming up, and we will be vending at most of them. That's another sign that spring is finally here. That, and the final rabbit/hare.

[Other than Beakerhead in September, Calgary doesn't seem to have anything in the way of steampunk festivals. The local steampunk groups are cosplayers who attend media SF conventions and march in parades.]

SEEN IN THE LITERATURE

Carotenuto, F., et al (2018) **The well-behaved killer: Late Pleistocene humans in Eurasia were significantly associated with living megafauna only.** PALAEOGEOGRAPHY, PALAEOCLIMATOLOGY, PALAEOECOLOGY 500:24-32

Authors’ abstract: *The end of the Pleistocene was characterized by an intense, highly selective extinction event, affecting large-bodied terrestrial mammals worldwide. This period coincides with two major events, the last glacial period, and the dispersal of technologically advanced Homo sapiens outside the Old World.*

Upper Paleolithic hunters were armed with advanced, projectile weapons, and were able to dispatch prey as large as mammoths. As human population size was rapidly expanding, and hence means meat consumption rate was also growing, Paleolithic hunters are often held responsible for the extinction of mammalian megafauna. Yet, whether human focused on megafauna as prey, and drove them to extinction, remains uncertain.

Here we model spatial and temporal patterns in habitat suitability for 24 megafauna species and Homo sapiens in Eurasia. We find that within land patches most suitable for humans, the identity of the most abundant herbivorous mammals switched from warm adapted species (such as the wild boar) to cold adapted species (reindeer) as climate switched from mild to cold conditions. Importantly, extinct herbivorous megafauna species were consistently rare within habitat patches optimal for humans.

This suggests that humans may have settled under relatively constant climatic conditions, and possibly behaved as efficient predators, exploiting their prey in a cost-effective manner.

These results are in accordance with evidence coming from the archaeological record, where medium sized living herbivore species are overrepresented in comparison of their natural abundance. For Late Pleistocene megafauna in Eurasia, human hunting may have been just an additional, non-decisive extinction factor.

Bustos, D., et al (2018) **Footprints preserve terminal Pleistocene hunt? Human-sloth interactions in North America.** SCIENCE ADVANCES 4:DOI: 10.1126/sciadv.aar7621

Authors’ abstract: *We present footprint evidence from White Sands National Monument in New Mexico for the association of sloth and human trackways. Geologically, the sloth and human trackways were made contemporaneously, and the sloth trackways show evidence of evasion and defensive behavior when associated with human tracks. Behavioral inferences from these trackways indicate prey selection and suggest that humans were harassing, stalking, and/or hunting the now-extinct giant ground sloth in the terminal Pleistocene.*

Foot length analysis of both excavated and unexcavated human tracks suggests multiple individuals of varying age or sex. A number of human footprints (>10) are superimposed into sloth tracks. The human footprints share the same long-axis orientation and occur inside the sloth track outline, indicating that the human trackmaker was walking intentionally within the sloth track. These steps required the person to adjust her/his normal stride to accommodate the longer stride of the sloth, which typically showed tracks spaced 0.8 and 1.1 m apart.

Two superimposed sets of deformation and fluid-escape structures exist: The initial set associated with the sloth track and the subsequent deformation structures from the human heel strike. Similar pore-water conditions existed during both track-making events.

No expulsion of sediment or ponded water (that is, ejecta or wash/scour structures) resulted from the human foot strike, and little or no sediment lies between the two plantar surfaces. This relationship suggests that the sloth tracks remained unfilled, either by water or by sediment, when the human followed.

In terms of the second test, the tortuosity of sloth trackways increases when human tracks are present, with sharp direction changes that suggest evasion. In addition, the circular sloth trackways are consistent with defensive behaviors in which sloths reared on their hindlimbs, freeing their forelimbs for defense. We termed these structures flailing circles.

To be clear, the human-sloth interactions are not limited to one sloth trackway (or track size) but to several. It is, however, difficult to say definitively whether the sloths were traveling as a group and therefore were being collectively

harassed or whether these features represent successive harassment events. The co-location of these trackways favors the former, in which case the results have implications for the social behavior of sloths.

We argue that the tracks evidence temporal and spatial associations of sloths and humans and infer that humans actively stalked and/or harassed sloths, if not hunted them. The absence of a carcass is not surprising for several reasons. The vast majority of hunts by modern hunter-gatherers are unsuccessful (for example, 94% for Hadza).

Sloths are so densely muscled that an outright kill is unlikely. Even if the hunt had been successful and the animal had died in the study area, the wetting and drying cycles and high pH rapidly degrade bones; thus, preservation of bones in the terminal Pleistocene therefore remains improbable.

Munoz-Rodriguez, P., et al. (2018) **Reconciling conflicting phylogenies in the origin of sweet potato and dispersal to Polynesia.** CURRENT BIOLOGY 28:1246-1256

Authors' abstract: The sweet potato is one of the world's most widely consumed crops, yet its evolutionary history is poorly understood. In this paper, we present a comprehensive phylogenetic study of all species closely related to the sweet potato and address several questions pertaining to the sweet potato that remained unanswered. Our research combined genome skimming and target DNA capture to sequence whole chloroplasts and 605 single-copy nuclear regions from 199 specimens representing the sweet potato and all of its crop wild relatives (CWRs).

We present strongly supported nuclear and chloroplast phylogenies demonstrating that the sweet potato had an autopolyploid origin and that Ipomoea trifida is its closest relative, confirming that no other extant species were involved in its origin. Phylogenetic analysis of nuclear and chloroplast genomes shows conflicting topologies regarding the monophyly of the sweet potato.

The process of chloroplast capture explains these conflicting patterns, showing that I. trifida had a dual role in the origin of the sweet potato, first as its progenitor and second as the species with which the sweet potato introgressed so one of its lineages could capture an I. trifida chloroplast.

In addition, we provide evidence that the sweet potato was present in Polynesia in pre-human times. This, together with several other examples of long-distance dispersal in Ipomoea, negates the need to invoke ancient human-mediated transport as an explanation for its presence in Polynesia.

These results have important implications for understanding the origin and evolution of a major global food crop and question the existence of pre-Columbian contacts between Polynesia and the American continent.

Le Bris, David (2018) **What is a market crash?** ECONOMIC HISTORY REVIEW 71:doi.org/10.1111/ehr.12540

Author's abstract: Crashes, measured as strong price decreases, are sometimes difficult to reconcile with historical events. This can be explained by the fact that a price variation will have a greater negative impact in a stable financial context than a similar variation during a highly volatile period.

For example, French stocks decreased painlessly by 16 per cent in August 2002, whereas a similar fall in January 1882 led to the failure of several brokers. Market volatility was very low at the end of the nineteenth century, whereas investors are now used to dealing with large price movements. A fall of 16 per cent was much more of a shock in 1882 than it would be today.

To control for the instability of the volatility, a new method for identifying crashes is proposed. Each price variation is measured in numbers of standard deviations of the preceding period. These adjusted variations can then be ranked to identify the worst market crashes.

This method is tested on four long-term series. A better match between crashes and historical events is achieved than with pure price variations. This improved matching brings new insights to several historical debates.

Kulahci, I.G., et al (2018) **Knowledgeable lemurs become more central in social networks.** CURRENT BIOLOGY 28:1306-1310

Authors' abstract: Strong relationships exist between social connections and information transmission, where individuals' network position plays a key role in whether or not they acquire novel information. The relationships between

social connections and information acquisition may be bidirectional if learning novel information, in addition to being influenced by it, influences network position.

Individuals who acquire information quickly and use it frequently may receive more affiliative behaviors and may thus have a central network position. However, the potential influence of learning on network centrality has not been theoretically or empirically addressed.

To bridge this epistemic gap, we investigated whether ring-tailed lemurs' (Lemur catta) centrality in affiliation networks changed after they learned how to solve a novel foraging task. Lemurs who had frequently initiated interactions and approached conspecifics before the learning experiment were more likely to observe and learn the task solution.

Comparing social networks before and after the learning experiment revealed that the frequently observed lemurs received more affiliative behaviors than they did before; they became more central after the experiment. This change persisted even after the task was removed and was not caused by the observed lemurs initiating more affiliative behaviors.

Consequently, quantifying received and initiated interactions separately provides unique insights into the relationships between learning and centrality. While the factors that influence network position are not fully understood, our results suggest that individual differences in learning and becoming successful can play a major role in social centrality, especially when learning from others is advantageous.

Bierhorst, P., et al (2018) Experimentally generated randomness certified by the impossibility of superluminal signals. NATURE 556:223-226

Authors' abstract: From dice to modern electronic circuits, there have been many attempts to build better devices to generate random numbers. Randomness is fundamental to security and cryptographic systems and to safeguarding privacy. A key challenge with random-number generators is that it is hard to ensure that their outputs are unpredictable.

For a random-number generator based on a physical process, such as a noisy classical system or an elementary quantum measurement, a detailed model that

describes the underlying physics is necessary to assert unpredictability. Imperfections in the model compromise the integrity of the device.

However, it is possible to exploit the phenomenon of quantum non-locality with a loophole-free Bell test to build a random-number generator that can produce output that is unpredictable to any adversary that is limited only by general physical principles, such as special relativity. With recent technological developments, it is now possible to carry out such a loophole-free Bell test.

Here we present certified randomness obtained from a photonic Bell experiment and extract 1,024 random bits that are uniformly distributed to within 10-12. These random bits could not have been predicted according to any physical theory that prohibits faster-than-light (superluminal) signalling and that allows independent measurement choices.

To certify and quantify the randomness, we describe a protocol that is optimized for devices that are characterized by a low per-trial violation of Bell inequalities. Future random-number generators based on loophole-free Bell tests may have a role in increasing the security and trust of our cryptographic systems and infrastructure.

Manthi, F.K., et al (2018) Gigantic lion, Panthera leo, from the Pleistocene of Natodomeri, eastern Africa. JOURNAL OF PALEONTOLOGY 92:305-312

Authors' abstract: The partial skull of a lion from Natodomeri, northwest Kenya is described. The Natodomeri sites are correlated with Member I of the Kibish Formation, dated to between 195 ka and ca. 205 ka. The skull is remarkable for its very great size, equivalent to the largest cave lions (Panthera spelaea) of Pleistocene Eurasia and much larger than any previously known lion from Africa, living or fossil.

We hypothesize that this individual represents a previously unknown population or subspecies of lion present in the late Middle and Late Pleistocene of eastern Africa rather than being an indication of climate-driven size increase in lions of that time.