

OPUNTIA 481



Late August 2020

Opuntia is published by Dale Speirs, Calgary, Alberta. It is posted on www.efanzines.com and www.fanac.org. My e-mail address is: opuntia57@hotmail.com When sending me an emailed letter of comment, please include your name and town in the message.

AROUND COWTOWN: BOW RIVER RAPIDS

photos by Dale Speirs

Ah those lazy hazy days of summer. It's been a hot dry summer in Calgary, so fortunately Cowtowners are not obligated to wear masks outdoors. Social distancing? What's that?

I strolled down the Bow River Promenade past the Inglewood district east of the downtown core to where the Bow River makes a right-angle turn and flows due south to the flatlands. The rapids are popular with rafters, just turbulent enough to make them exciting but not killing too many people that I've noticed in the news.

At right is the approach walking eastward, just before the pathway opens out onto the riverbank. Listen to the murmur of the cottonwood trees.

Below: A general view of the upper rapids from the Promenade.



But before that, these. In 1891, the Canadian Pacific Railway built this bridge across the river just upstream from the rapids.







Left:
Looking
upstream
from the
bottom of
the rapids.
The upper
rapids are
out of sight
beyond the
bend.

Below:
Looking
downstream
where the
Bow River
now flows
due south.



WHEN WORDS COLLIDE 2020: THE VIRTUAL CONVENTION
by Dale Speirs

[Reports of previous WWC conventions appeared in OPUNTIA #71, 253, 266, 282, 318, 350, 387, 421, and 452.]

Calgary’s annual readercon When Words Collide is usually held on the second weekend in August but like every other convention it was trashed by the COVID-19 pandemic. Like many conventions, WWC attempted virtual panels via videoconferencing. The same weekend was used, August 14 to 16. (Their Website is www.whenwordscollide.org)

The volunteers did their best on short notice and with little or no experience. I do not criticize them, nor should anyone else say the same about whatever convention they attended online. Everywhere around the world, it is obvious that videoconferencing is about where personal computers were in the early 1990s; better than they used to be but needing another decade of upgrading.

At real conventions, I was never the only person in the audience taking notes. Over the years I’ve observed about half the audience, no matter its size, was jotting down panel comments. One or two used laptops but the vast majority, including me, used pen and notebook as being much faster. There was always at least one lady in the front row with her laptop camera aimed at the panel.

For this convention, I sat at my desk in the den, watched the proceedings on my smartphone, and typed notes directly into my laptop, which has always been offline. Panel descriptions taken from the programme schedule are in italics.

Social Media Isn’t.

Toxic tweeters and trolls should be made to acknowledge the following paragraph from the WWC 2020 programme pdf (bold face emphasis is mine):

*Finally, please remember that the festival is holding this online version as a hasty replacement for our regular in-person festival. We are new to this and haven’t had a lot of time to figure things out. All aspects of this festival are being offered by volunteers, many of whom have never participated in online sessions before. **Please accept what is offered in a spirit of community and gratitude, even when things go wrong, as they inevitably sometimes will. We are all doing our best.***

Knowing what has happened at American conventions, WWC added terms of conduct before anyone could access the programme schedule, which was the only place to get the Zoom links.

What I Watched.

Writing After The World Ends
David Worsick,
H a y d e n
Trenholm, Celeste
Peters, Susan
Forest [PM]
Host: Calvin D.
Jim

Society-shaking events have writers scrambling as they try to decide how or if to include them in their works in progress. Can current events be ignored? If not, how do authors incorporate them into their fiction as they write in ‘real time’?

Trenholm said that near-future science fiction should incorporate the aftereffects of the events. Do not be too specific, especially since the ramifications may not be fully known by publication date. Such fiction will become out-of-date if too specific. Ten years from now no one will be reading COVID-19 stories.

Worsick mentioned near-future zombie apocalypse books. They are fiction and no one is disappointed because the events didn’t actually happen. He said that writers want to get their ideas out to the reader and take the risk as to whether

ONLINE
CONDITIONS AND
CODE OF CONDUCT

You must agree to abide by this code of conduct before you can download this year’s program.

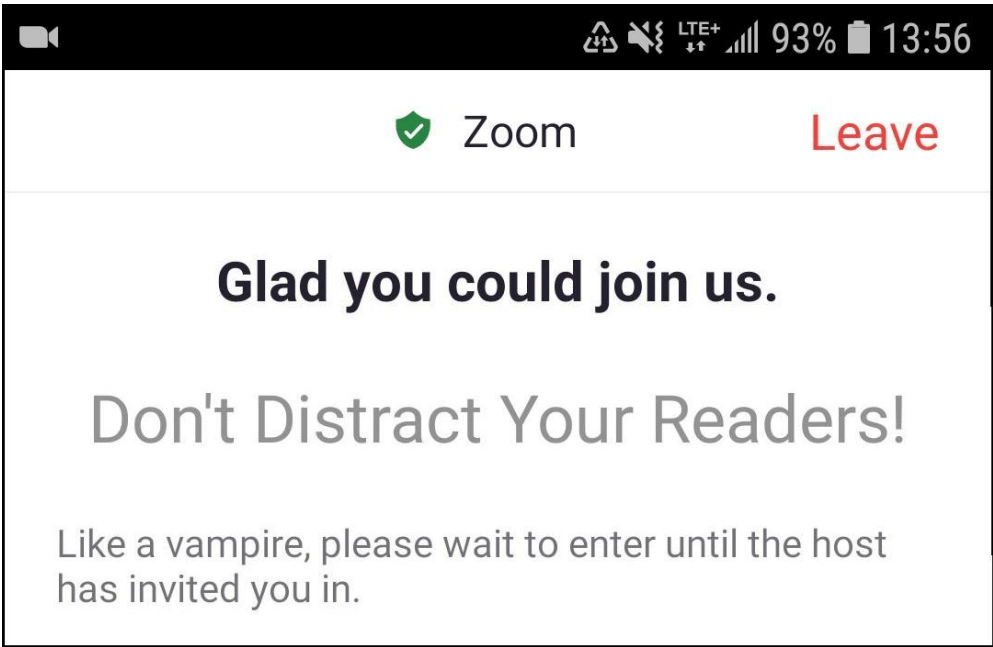
- 1. Most festival sessions are being recorded for later public access. By participating in a recorded session, you consent to allowing that session to be made public.**
- 2. When Words Collide promotes a collegial, welcoming environment for attendees, presenters, and volunteers. Harassment and other behaviour at odds with this environment will not be tolerated. Webcast hosts will expel offenders from sessions at their discretion.**

☐ **I have read, and agree to abide by, the above code of conduct.**

or not anyone will read or remember them. Current-event fiction has a much higher risk but even so, the writer may be happy to have readers for that short term.

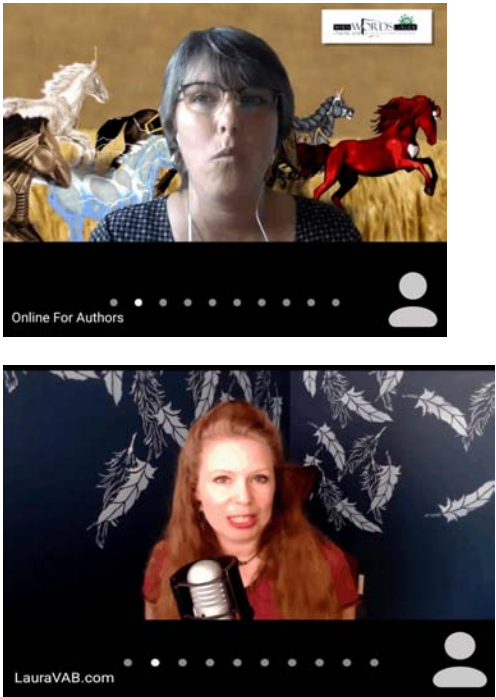
Peters said that if something like the pandemic is relevant to the story, then the readers will expect at least a passing reference to those events. Bear in mind that the readers will have personal experience of the event and each will interpret the text in their own way. She mentioned World War Two as an example of shared experience that few living today have, and the subsequent Cold War that many still living today remember.

Forest pointed out the many unexpected events of the pandemic that science fiction writers could not have predicted. In particular, the economic effects surprised most people. An example was the divergence in pandemic effects between Canada and the USA, the latter being more severely affected despite its superior technology and bigger economy.



Don't Distract Your Readers!
Holly Schofield, Laura VanArendonk Baugh, J.L. Cole, Jennifer Cockton

Readers weigh in on what common distractors writers can watch out for.



Cockton said grammar and spelling were obvious culprits, but another problem is reuse of the same phrase many times in a novel. She mentioned one novel which had a character whose eyes kept welling up in tears throughout the book.

Baugh said it was easy to tell when some novelists were getting their science information from Hollywood movies. The printing details matter; she remembered one book she received whose font was too small for extended reading, so she never went more than a few pages.



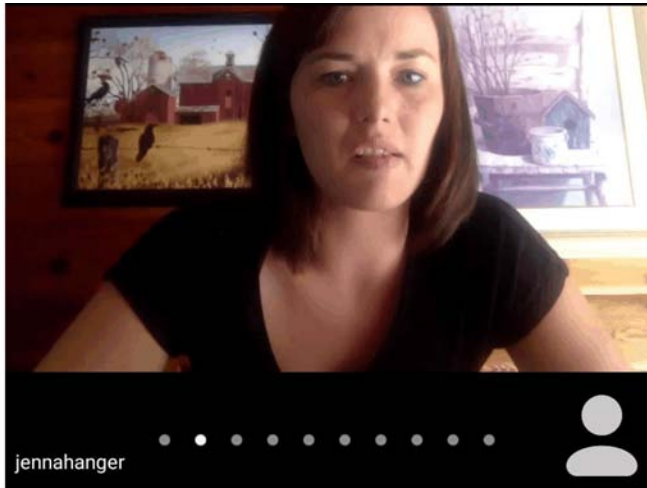
Schofield said that while readers will overlook a few errors, the failure of an author to properly build a fictional world causes a loss of interest.

A standard world will not interest the reader. There have to be tourist viewpoints or exciting events to keep the reader in the book. She doesn't

want to read a book that has a family tree in the appendix so the reader can find out who was who.

Cole said authors shouldn't over-explain but conversely shouldn't use big words and concepts which the reader may miss.

Explanations should come with the flow of the story, not suddenly stopping for infodumps.

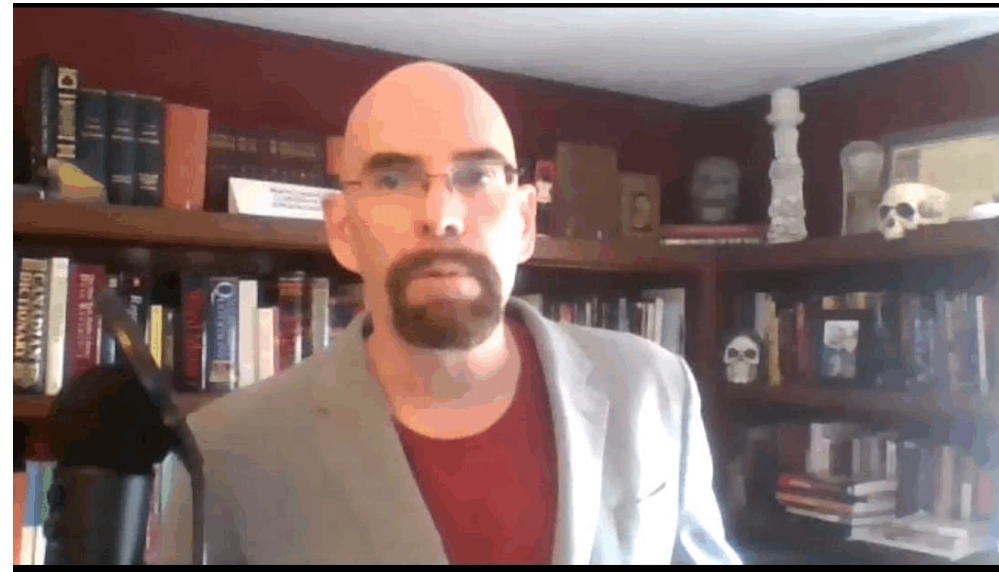


10 Ways to Leverage Short Fiction for Marketing and Making Money Mark Leslie Lefebvre

Understand the benefits that writing short fiction can have in both the short term and the long term, create additional assets that expand your offerings in breadth and depth as an author. Reach new readers, enhance your author brand, and create new cash flow opportunities by leveraging your intellectual property on one story or project multiple times and in multiple formats.

Embracing all the options available as a hybrid author, you can truly expand and grow your readership and income streams.

This was a slide show by Lefebvre on how he makes money at writing. Selling requires patience and ability to tolerate lots of rejection. It is not a get-rich-quick plan. His idea is to accumulate little streams of income that gradually increase cumulatively as the royalties build up over the years. So does the readership, since if they liked one story, they will seek out others.



As an example from his early days of marketing, in 2011 June, Lefebvre sold 14 copies of a short story on Amazon for \$4.90 in royalties and 5 copies on Smashwords for \$2.80. Over the years the story has earned him US\$300 to date and continues to earn a few dollars each month.

The three main formats are ebooks, POD (print on demand) paperbacks, and audio books. The latter are very expensive to prepare, in hundreds of dollars, and the author must bear the costs. Online selling through Kindle, Kobo, and Apple is actually just leasing the copyright for your story. They are distributors, not publishers.

Many strange distributors on the Internet can provide streams of income. Examples are Blaze Ward, BundleRabbit, StoryBundle, Humble Bundle, Babelcube (foreign language sales), Active Reader, and many anthologies. Traditional print publishers are far down the list.

Space Force versus Mars
Jim Sheasby, David Worsick, J.R.H. Lawless, Ron S. Friedman [PM]

Private companies are building ships to ferry colonists to Mars. At the same time, countries are funding the creation of military forces in space and colonies on the moon. Can both interests coexist? Or will there be war, figuratively or literally. Join in this riveting discussion about humanity’s imminent expansion beyond our planet and the challenges it will bring.



Sheasby remarked that weaponization of space is currently not a major part of military forces but will grow over the next century as humans expand into space.

His analogy was to aircraft carriers in World War Two, which initially were not considered as important as battleships but displaced them by 1945. As space forces develop, their importance will grow and they will be used in ways not yet thought of.



Lawless said the establishment of a U.S. Space Command was more to create a separate culture that will focus on space, rather than as a side activity of the Air Force. He brought up the subject of space

law, of which there is only one current treaty, which is not enforceable in practical terms. In the same manner that frontiers were settled in North America, laws will be enacted to give legal title to land and mines in exchange for guaranteed developments.

Friedman said the current and main concern of space forces is to know at all times where the enemy’s ships and aircraft are. He gave as an example the supply convoys during the Battle of the Atlantic. Imagine what the Nazis could have done had they been able to know the location of every Allied ship.

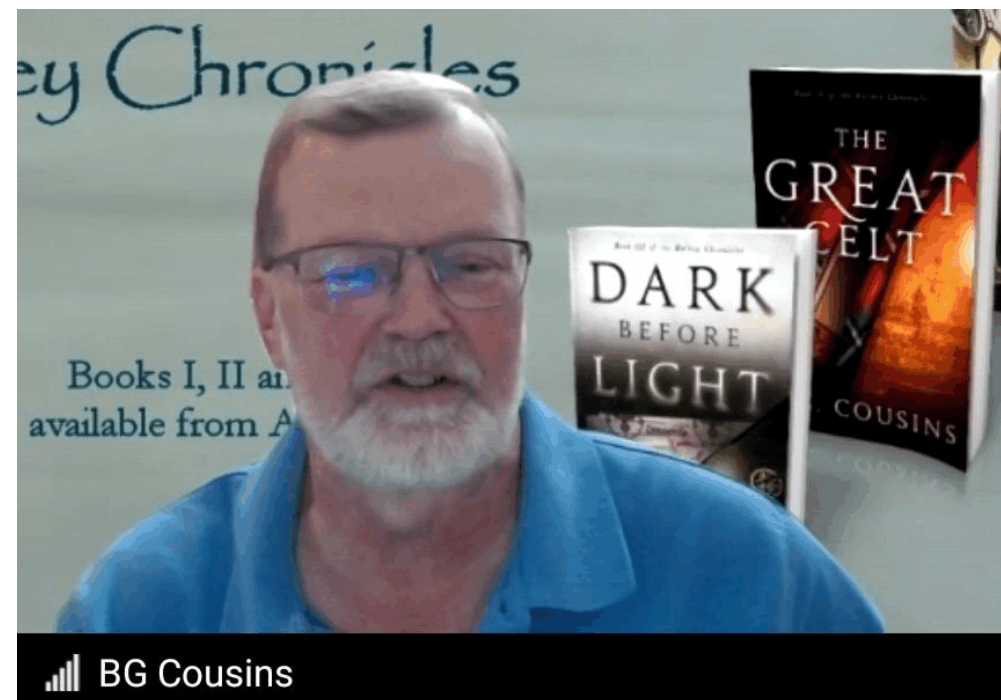


Friedman zoomed in from the bridge of his starship. I nominate him for best green screen.

Worsick said space mining by private companies will turn into a range war. They will then rely on military forces to protect their assets, in the same way that the American military protects oil resources in the Arabian Gulf. Sheasby interjected that claim jumping in space will trigger effective agreements and enforcement, the same as in Earth history. Worsick mentioned the Canadian model, where the Mounties were stationed ahead of settlers and miners, and thus were able to keep the peace.

The panelists discussed space piracy, which would probably be done by small nations sheltering rogue organizations rather than groups of individuals.

The best science fiction creates technology based on real physics theory. The best historical fiction does not include a technology that didn't exist yet. Doing research on technology is not only about whether it was around or feasible in the future, you need to use it in your stories properly. This presentation shows how to find, date and use technologies effectively in your writing.



Subtitled in Cousins' Powerpoint slide show: *Don't use an automatic rifle in the 17th Century unless you are time traveling.* Writing future or historical fiction does require research if you are going to go into detail about technology. The four types of technology considered by Cousins were: weapons, transportation, agriculture, and buildings.

Weapons evolved from rocks and clubs to swords by 3300 BC, then gunpowder in Europe by the 13th Century (8th Century in China). The concept of fission weapons didn't develop until 1939. The techniques of using them increased in complexity up to the bow-and-arrow and swords. Gunpowder allowed easier use of hand weapons with less training.

Transportation went from walking to horses to sailing ships to the first engines in 1698. Adults can walk about 30 km per day but carrying stuff required the invention of wheeled carts. Steam power didn't really get going until the late 1700s. That boosted coal mining, then when the coal started to run out, a switch to oil, which set the petroleum industry in motion.

One of the biggest boosts to civilization was the invention of the saddle, so warriors could fire arrows and swing swords from galloping horses without falling off. The horse collar sped up agriculture, allowing horses to replace yoked oxen. Engines boosted machine tool and die design, since they needed pistons, crankshafts, and other parts not previously part of normal commerce.

Agriculture made the development of cities possible by 9500 BC when wheat was domesticated in Syria and Iraq. Agriculture relies heavily on technology to speed up the harvest, such ploughs, combines, and tractors.

Buildings were wood until Nineveh became the first stone city. The Romans invented concrete, and glass windows were first used in Egypt in 100 AD. Materials changed rapidly in modern times. Don't write a story set in the 1960s where a character drinks from a plastic water bottle.

Know how the technology works, such as how far a horseman can ride in a day. For science fiction, take your inspiration from Star Trek, which extrapolated technology, as opposed to Star Wars, which was comic book fantasy. Cousins said: *Do not use Hollywood in general. They are very lazy with their research.* Ultimately, the best writing uses lots of research from scientific sources.

What I Didn't Watch.

Like every convention, there are always some panels that seemed interesting but one can't make the time for them. Notwithstanding the fact that I had no idea what happened at these panels, I'll append my comments in Roman text.

There Are No Tigers

Dawn Harvey

Writers write. Usually alone in their rooms. Because that's the way they like it. If they wanted to perform, they would have become actors! But writers are often called upon to read their works aloud in public. For many, this is a stress and nausea inducing experience that they would really rather just avoid. If you can

relate, this is the session for you. Dawn will provide you with some basic tools to help you deal with this unavoidable part of the business with less stress and vomiting and more confidence.

I never go to author readings and I gave up on audio books a long time ago. I’ve had enough of droning voices and lectors whose only idea of variation is raising or lowering their voices. The only thing worse than a man trying to read female dialogue in falsetto is a woman trying to read male dialogue in a throaty voice.

That is why I enjoy old-time radio shows so much, done by professional casts with proper sound effects and the like. My advice is don’t pay money for audio books if you want something to listen to on your commute or while jogging. Go to www.otrrlibrary.org which has thousands of free mp3 downloads of hundreds of radio series. Comedy, mystery, fantasy, horror, science fiction, drama, big bands and swing, something for everyone.

World Class Disasters

Craig DiLouie, P.D. Workman, Ariel Kroon, David Worsick [PM]

Host: Selene O’Rourke

Climate change, asteroid strikes, virulent viruses. There are no end to disasters that can “plague” our fiction writing. Our panelists will examine these and other global catastrophes from a scientific viewpoint and discuss how to portray them accurately in fiction writing.

It will be interesting to see how science fiction writers change the way they portray large-scale disasters. I don’t recall reading any plague novels where everyone had to social distance and stay 2 metres apart. Skyscraper real estate values are in freefall in Canada as big businesses discover they didn’t need all those workers at desks. Essential workers did all right, while those with no skilled trade found out how useless they really are.

The 1918 influenza plague has been used as a template for the 2020 plague, but there are important differences. In 1918, no one knew what a virus was, and there weren’t dozens of Big Pharma companies racing to make a fortune from vaccines.

The Cohesive Anthology

Hayden Trenholm, Robert Bose, Jeff Campbell, Celeste Peters [PM]

Host: Bill Peters

Anthologies are popular these days, but what do you need to know when building one? Theme, story placement, and editing all play critical roles. Whether soliciting the writing of others or compiling one of your own work, this panel of seasoned editors and publishers will discuss what it takes to create a cohesive anthology.

This is an ongoing grudge of mine, especially in pastiche anthologies such as Sherlock Holmes or the Cthulhu Mythos. Editors stick in stories that don’t match the theme because they are desperate to fill the space. Another common failing is not sorting the stories in chronological order, such as the first of a Holmes anthology being about him as an old man, the next story on his beginnings before he met Watson, and so forth.

Ethics And Exploration Contamination

Jim Sheasby, Michael Gillett, Ron S. Friedman [PM]

Host: Selene O’Rourke

When we begin exploring our solar system and creating off world colonies, we won’t be going alone. We’ll be bringing bacteria, and viruses with us that could contaminate and even destroy potential alien life. How do we avoid bringing plagues to new worlds? Should we visit them at all? This panel will discuss the ethics of human space exploration.

Concern has already been expressed about space probes contaminating the moons of Jupiter, where it seems most likely that microbial life may be found.

Medical Errors and Tropes

Blair Lindsay, P.D. Workman [PM]

Host: Danita Maslankowski

A bullet in the shoulder that doesn’t hit anything important? Knock-outs without actual damage? Induced comas? What is realistic and what is not? A discussion of common medical mistakes and questions in fiction.

Countless mystery stories had the hero shot in the shoulder but brush it off as if it were a graze. That location is actually one of the worst parts of the body to be shot in, since a major artery runs through to the arm and the bullet would shatter the joint, necessitating amputation.

The Seven Sentence Short Story

Edward Willett

Host: Catherine Saykalay-Stevens

How many workshops have you attended where you had a complete short story at the end of the hour? The Seven-Sentence Story, invented by science fiction writer/teacher James van Pelt, is a concise, fun exercise in plotting. In just seven sentences, you'll introduce a character and a problem, complicate the situation, and resolve it, exactly what you need to do in your full-length stories. Aurora Award-winning SF/fantasy writer Edward Willett facilitates.

Willett is one of the funniest panelists I've seen in past WWCs, but he needs a live audience to react against, not thumbnails on a screen. He is a flatlander from Saskatchewan. I hope to see him in next year's WWC after the world returns to some semblance of normality.

Researching Alternative Histories

Ron S. Friedman, B.G. Cousins, Susan Forest, Chris Patrick Carolan [PM]

Host: Calvin D. Jim

Based on elements stemming from real life, Alternative History can mix elements of sci-fi, fantasy and historical fiction. Writing them requires impeccable research, and scrupulous attention to detail. Our panelists will share how to do methodical historical research, what makes a great alternative history and how to write them.

First of all, kudos to the programme book editor for correctly calling it alternative history, not alternate history. Much AH is improbable because despite massive divergences postulated, the same historical characters appear centuries later. If the Tunguska bolide had exploded over northern Europe instead of Siberia, don't bring in Hitler, Einstein, or Churchill as they were in our timeline.

Advertising In The Apocalypse

Joshua Pantalleresco

With 2020 kind of being, well, 2020, Joshua Pantalleresco talks about advertising. What can authors do with the tools of the landscape, but perhaps more importantly, why authors need to push their presence in these moments.

No bookstore signings or convention appearances. The Internet is a cacophony where no one can hear you. What is to be done?

Cities of the Future

B.G. Cousins, Ariel Kroon, Holly Schofield, Ron S. Friedman

Host: Tammy Lyn Carbol

How will climate change, population growth and mass immigration affect the cities of the future? Will we live in mega buildings that reach the clouds? Build massive city rafts on the ocean? Or live underground in tunnels and caves? This panel will discuss what our future cities may look like.

Given the pandemic, the crowded inner cities don't look so good anymore. The condo towers downtown, once touted as convenient to walk to work, are being abandoned in favour of detached or townhouses out in the suburbs where you don't have to wait for a germy elevator. Since businesses are already announcing they are going to keep employees working from home even after the pandemic is over, who needs a pricey apartment?

We'll Meet Again Some Sunny Day.

When Words Collide 2021 will take place on the weekend of August 13 to 15 at the usual venue of the Delta Calgary South hotel. Details from www.whenwordscollide.org

See you on the other side.

STATELY PILES: PART 5

by Dale Speirs

[Parts 1 to 4 appeared in OPUNTIA's #386, 395, 415, and 455.]

Not So Cozy Mysteries.

HOUSE OF SECRETS (1936), written by John Krafft (with an extra ‘f’) based on a play by Sydney Horler, was a manor house mystery movie on a bargain bin DVD. The movie began on board an ocean liner en route to England. Passenger Barry Wilding saved Julie Kenmore from the attentions of a masher.

Jump cut to London, where Wilding was informed that his rich uncle had died and left him an estate called The Hawk’s Nest plus £10,000 (about \$500,000 in today’s depreciated currency). Wilding never made it to the front door before being run off at gunpoint by interlopers.

Someone then made him an offer to sell the property or else. Other threats were offered by assorted unfriendly personalities, and the police were strangely uncooperative. All in all, quite the conundrum for Wilding as to how to claim his rightful inheritance.

The interlopers were Professor Kenmore (first name never given) and his beautiful daughter Julie (well, he was a mad scientist). Wilding discovered she was the same woman he had met on board ship. He romanced her but got nowhere trying to get his estate.

Many alarums and excursions at the manor, serenaded by occasional screams and maniacal laughter that the Kenmores never deigned to explain. A gang of hoodlums staked out the manor from a nearby apartment, seeking treasure hidden in the big house. A three-way battle broke out between the groups.

What seemed strange was that the front gate of the manor grounds was never locked, nor the doors of the house. As a result, there was more pedestrian traffic in the manor than out on the street. As the conspiracy developed, one had to wonder if the denouement would live up to its billing.

The gang made nighttime raids inside the house to search for the treasure. As an amusing aside, they also popped popcorn in their apartment during their stakeout. One never thinks of Mafioso enjoying a treat.

About halfway through the movie, a MacGuffin appeared. It was a cryptogram on parchment, written in Ye Olde English, or at least Hollywood’s idea of how an Olde Englishman would inscribe a parchment. It described the location of the treasure but had been torn in half long ago for security. Wilding had half and the gang had the other half. Neither side could use its half by itself to find the treasure.

Prof. Kenmore seemed to have his own experiments going, quite unrelated to the treasure, about which he knew nothing. It wouldn’t be a manor house with secret passageways and dungeons, where many of the scenes subsequently took place.

The grand finale came in the dungeons. The explanation was complicated and some of the characters had five or ten minute dialogues explaining all. Prof. Kenmore had been working on a universal antidote to all poison gases, which the government wished to keep quiet. The Hawk’s Nest was somewhere in London, and the public would be testy if they learned poison gas research was being done there.

The treasure was found, which proved to be a disappointing chest of plate and coins. It was legally Wilding’s, and now with a fortune to defray the cost of living in the manor, he proposed marriage to Julie to make her legal as well.

The movie was different from most manor house mysteries because of the extended conspiracy theory. A different sort of plot. Worth watching once.

THE HAUNTING HOUR was an old-time radio series that aired from 1944 to 1946. No credits to actors or writers were given. This and other old-time radio shows are available as free mp3s from www.archive.org or www.otrrlibrary.org.

“Sinister Estate” was a 1946 episode which opened with a psychiatrist telling the lord of the manor that his son Roger had incurable agoraphobic and likely would never set foot outside the estate again.

The old man revised his will to state that Roger inherited the estate until he died, at which time his brothers Charles and Edward would inherit the fortune. There was also provision for Aunt Mildred to live at the manor. One is surprised that the lawyer, Uncle Amos, didn’t point out the obvious foreboding.

Jump forward to 18 years later. Under the terms of the will, Charles and Edward had to live on the estate with Roger to enjoy any income, and so they did. The gardener Higgins perambulated the grounds, talking to the flowers. He wasn't really insane, just recapitulating the plot every so often for the benefit of listeners who tuned in late.

By then, Charles had a wife Abby, who was ambitious and wanted freedom. She gave him an ultimatum. Charles and Edward had a conversation in which the obvious was stated. Roger wasn't stupid, so it was Charles who had the honour of being the first corpse. However the body was found outside the gates, beyond which Roger supposedly never ventured.

Edward was rather calm about the death, making Abby indignant. His calmness became permanent when Higgins dug up Edward's body in a flower bed. Abby, using Higgins as an assistant, went searching. They snuck up on Aunt Mildred and Roger re-burying Edward outside the gates. Amos then arrived with a shotgun, intending to boost the death toll.

There was a twist ending which caught Amos by surprise. Roger smirked about it afterwards. Well he might, for he now had the entire estate for his own.

INNER SANCTUM MYSTERIES aired on old-time radio from 1941 to 1952. It was an anthology series with mostly twist-ending mysteries but many weird fiction, horror, science fiction, and dark fantasy episodes. Only about 100 episodes have been preserved but they were enough to demonstrate the superior quality of the shows. The host wasn't quite as bwah-ha!-ha! smarmy as he would be in future episodes nor were there as many ghoulish puns but he was working on it.

The trademark opening of each episode was a creaking door slowly opening. The host would invite the listeners into the inner sanctum to hear the episode, telling them to be careful not to slip in the blood and pay no mind to the corpse over in the corner.

"The Amazing Death Of Mrs Putnam" was the first episode of the series, aired on 1941-01-07 with no writer credited. This was a manor house mystery which began with police receiving a telephone call from a hysterical woman named Martha Putnam. She said she was going to be murdered. They could hear a dog barking in the background. A shot was fired and the call abruptly ended.

A detective named Jeff Hanson and his assistant Ed Lamb (aka Porky) went out to investigate. Porky wasn't quite a village idiot but was definitely a sidekick, with a Noo Yawk accent yet. He was a compulsive counter. When they arrived, he counted the steps to the front door of the manor.

The butler Williamson was hesitant to admit them, probably because they didn't use the trades entrance. Some people don't know their place, sniff, sniff. Once inside the manor they met the relatives.

The niece Lois Putnam informed them that her Aunt Martha had died two hours ago, long before her alleged telephone call. Dr Halloway was in attendance and said the cause of death was a coronary thrombosis. Hanson and Porky inspected the body just to be certain. No gunshot wounds were present.

The list of suspects included Joel Adams the gardener, Martha's elderly brother who was a cranky old coot, and, because it wasn't entirely unheard of, the butler. Williamson talked privately to Hanson and babbled that it was murder but was short on details, other than the fact that she had been a nasty woman and was despised by her family. The dog was nowhere to be seen or heard. Note that well.

Porky went through the mansion, counting 19 windows and 3 bathrooms en passant. Hanson and Porky went outside and toured the grounds. They noticed a disturbance in the soil and dug up a dead dog, shot with a handgun. Walking around the mansion, Porky counted 20 windows.

Going back inside, they found a hidden room, with Martha as a prisoner. Her family, ungrateful ingrates that they were, forced her to write a new will leaving everything to Lois instead of Martha's brother. The body the police had been shown was that of the cook, who had indeed died of natural causes.

With only three minutes left in the episode, Hanson called a J'accuse! meeting to wrap up all the details. Halloway manfully confessed to the plot as revenge for Martha's cruelty to her family. And so to the closing organ music and creaking door.

INNER SANCTUM's reputation has descended to us as a weird fiction anthology series, but this first episode was a standard detective mystery. More was to come in future episodes.

ROGUE'S GALLERY aired on radio from 1945 to 1947, with a brief revival for the 1950-51 season. The episodes were written by Ray Buffum. Several actors portrayed private detective Richard Rogue to different effect.

The gimmick of the series was that once each episode Rogue would be rendered unconscious, during which time he would have a conversation with his alter-ego Eugor (spell it backward). Sometimes Eugor would offer valuable advice, most times he would just restate the plot for listeners who had tuned in late, and occasionally he was just padding to make up the time for the episode.

"The House Of Fear" was a 1945 episode which began with Richard Rogue hired by an insurance company to investigate the theft of the Somaliland Diamond from the mansion of James E. Lee. His granddaughters Sandra and Virginia lived with him. The gem had been insured for \$50,000, which would be at least \$500,000 in today's depreciated currency.

"That's a lot of money", Rogue sagely remarked to the insurance adjustor. Well yes, he was certainly stating the obvious. Given the brain damage he must have accumulated from being slugged unconscious so many times, it was an intellectual feat for him to form any coherent sentence.

The gem had been stolen at a house party by a thief identified as Slip Crane, plus an unknown assailant. Crane had been wounded in the getaway and had gone into hiding. The Lee family was strangely uncooperative with investigators. The big surprise was that James said he wasn't going to file a claim on the diamond.

Rogue barged his way in to the mansion. Beside the family, there was a guest John Wood. Sandra constantly attempted to get Rogue to leave, which raised his suspicions. She said Virginia had gone back to the city to her prep school. As he was escorted to the door, the housekeeper Marie (servants didn't have last names) warned Rogue there was some sort of trouble in the house, but she was interrupted before she could explain.

Rogue stopped off at a nearby diner. He collected some gossip from the Sam the counterman, who said he was doing his best business in years because of all the police and newspaper reporters. Sam mentioned that Virginia was a wild one. Rogue called the school from a telephone booth, who said Virginia was at her grandfather's house.

"It was all as plain as a nose on an anteater's face", narrated Rogue. Virginia had run away with Crane, he thought, which was why the old man didn't want to press the case. Rogue returned to the mansion but discreetly, parking his car away from the house and walking across the lawn toward the servant's entrance.

He never made it. Someone slugged him unconscious from behind and sent him to visit Eugor. During their chat, Rogue realized he had been slugged by a woman because he had smelled perfume. As he woke up, the episode paused for a shampoo commercial extolling the benefits of coconut oil. There's nothing worse than dry hair.

Returning to consciousness he found Sandra and Wood conversing in cahoots, so he played possum and listened. She told Wood she thought it was him she struck down. He seemed to take that remark quite calmly. He said now he would have to kill Rogue. Instead of doing the job out on the lawn, they lugged him back into the mansion where, along with James, they revived him with expensive brandy. Rogue told them his theory, which they accepted with alacrity, as well as offering him \$1,000 to forget the whole matter.

In a twist, Sandra snuck up behind Wood and slugged him unconscious with a fireplace poker. The explanations then came quickly. Wood was Crane's accomplice. The other man was hiding upstairs with Virginia as a hostage. The denouement was obvious. Shots were fired, the damsel in distress was rescued, as was the diamond, and Crane was sent up the river. Rogue blew his fee over the next few months while squiring Sandra around town.

MR KEEN, TRACER OF LOST PERSONS aired on old-time radio from 1937 to 1955. It was a soap opera style mystery show, produced by Frank and Anne Hummert, who at one time owned 40% of all radio series being aired during the Golden Age of radio. They were all soap operas except for MR KEEN.

The series was credited as written by Frank Hummert but actually done by a stable of house writers. The series was so over the top that for years afterwards Bob Elliott and Ray Goulding on their comedy show did a parody titled "Mr Trace, Keener Than Most Persons". It was difficult to tell the difference.

As the series progressed, Keen did fewer missing persons cases and more just plain murders. Mike Clancy was added as his assistant, with a phony stage Irish accent straight out of vaudeville. By the series demise in 1955, it was a straightforward mystery series.

“The Case Of Murder And The Star Of Death” was a 1949 manor house mystery. Mark Adams had recently purchased a fabulous sapphire which he showed off to three guests after a house party. They were in the library. I wonder if modern mansions bother with them, for I doubt the nouveau riche do much reading. In any event, they did in 1949. Adams took out a box, opened it, and tah-dah-ed with the gem.

The lights immediately went out. Of course they did. In the blackness of the room one of the guests said someone must have brushed against the light switch. He reached over and turned it back on. To the shock of Adams but not the listener, the sapphire was gone.

He was nice about it. He said he would assume it was a practical joke, turn out the lights for five seconds, and expected the stone to be returned. During the second blackout, someone stuck a letter opener into him. (Has any Gen Z-er ever seen a letter opener?)

The police were summoned, the guests were searched, the library was searched, but the stone was not found. Adams’ daughter Kay, who lived elsewhere, called in Mr Keen, who was accompanied by his assistant Mike Clancy. No lost persons were involved, for by now he was a private investigator. Keen and Clancy brought the guests back in for interrogation. They blamed each other and squabbled.

Keen noticed that two of them kept glancing at a roll-top desk adjacent to the table. Sending the guests on their way, he and Clancy began testing the desk for secret compartments. They found one, and found the Star of Death inside.

One mystery solved, but now the question was who hid it there. Keen deduced that Mark hadn’t known about the secret compartment, otherwise he would have looked inside it while searching for the stolen gem.

Kay told Keen that her father had purchased the mansion a few years ago. She didn’t know who from because at the time she was in a Swiss finishing school. Whoever sold the mansion to her father, complete with its furniture, probably knew about the desk.

Not a problem, as Keen visited the Land Titles office and found the vendor’s name on the title deed. The name was one of the guests. She had gambling debts and had to sell the family manor to make amends.

She was back in debt, hence the theft. She blabbed a confession, which was a mistake. That she might have known about the desk was not convincing proof in the absence of any other evidence.

As any lawyer will tell you, when accused of a crime, say nothing. It is up to the prosecutor to prove guilt, not the defendant to establish innocence beyond any reasonable doubt.

“The Eccentric Millionaire Case” was a 1950 episode set in a mansion in rural Pennsylvania. The millionaire in question, Otis Craig, didn’t make it past the 3-minute mark and was garroted. His half-brother John came to Mr Keen and Mike Clancy for help.

After Otis made his money, he had bought a 30-room mansion and lived in it by himself as a recluse. Everyone agreed that he was eccentric. If he was poor, he’d be crazy, but he was rich so he was just eccentric.

John gave Keen and Clancy the house keys and away they went. They were met by Elsie Horner, niece of the defunct, who was cleaning up the house preparatory to its sale. She had inherited it according to Otis’s will. John was the major heir, getting the most of the financials.

The meeting was interrupted by the village idiot Eben and his keeper Hortence Martin. Eben confessed to the murder. While Keen and Clancy were attending to them, they heard Horner scream. Running back inside the mansion, they found she was gone.

That plot point was immediately dropped, as the investigators instead drove Eben to the police station. Martin said she would stay behind and go for a walk to calm down. En route to the police, Eben babbled about hidden treasure in the mansion. They immediately turned about and rushed back to the mansion. The murder could wait.

In the basement they got into a gunfight with Martin. They won, of course. The floor was covered in \$100 bills, for she had located the hiding place. With her dying words, she confessed to murdering Otis. Keen then summarized the plot. Horner rushed in, with no explanation as to where she had been. The orchestra cued up the music, and so to the final commercial for Anacin headache tablets.

KNIVES OUT (2019), written by Rian Johnson, was a movie about the death of cranky old novelist Harlan Thrombey in his manor house. It had an ensemble cast of big-name movie stars and young up-and-coming actors.

The story was told in flashback form as the police investigated when Harlan was found with his throat slit. The initial verdict was suicide but a private detective didn't believe it. Harlan had invited his family for his 85th birthday party. A malignant lot they were. He had made himself unpopular with kith and kin before his death.

Harlan told his son-in-law Richard to confess an adulterous affair to his daughter Linda. He cut off his daughter-in-law Joni's \$100,000 annual allowance when he learned she had been double-dipping into his bank account.

His literary affairs had been handled by his publishing company run by his son Walt, whom Harlan dismissed on the day of his birthday. His grandson Ransom was acting up, a rebellious young man without a cause.

The reading of the will left everything to his nurse Marta Cabrera. Needless to say, that was when the knives came out, as the rest of the family resented being excluded from their patrimony, not to mention being made homeless as none of them would be allowed to live in the big house. Cabrera had her own guilty secret, as she thought she had accidentally overdosed Harlan with morphine.

Many alarms and excursions occurred. One of the excursions was a car chase, rare in manor house mysteries. It was quite funny, as Marta drove a subcompact car that could not possibly outrun the police cruisers. She ducked and wove through tight spots the cruisers couldn't follow but nonetheless was quickly trapped. As she surrendered to a trooper he said to her: *That was the dumbest car chase of all time.*

The will stood as written, and the killer identified and taken away in handcuffs. The final scene was Marta evicting all the Thrombeys, who would now have to work for a living on their own and find their own apartments.

"The Angry House" by Richard R. Smith (1955 Summer, STARTLING STORIES, available as a free pdf from www.archive.org) was about a pair of burglars intruding into a house at night while its owners were away. A thoroughly automated house with artificial intelligence.

Unfortunately its defense systems were not working, so it did the best it could with the housekeeping robots. Self-guided vacuums, a robot valet, climate controls, and the like. It didn't succeed. The ending was a cheat, as the house used its previously unmentioned anti-gravity rays to lift high up in the dark, causing the burglars to fall to their deaths as they exited.

Haunted Houses: Uncozy.

The big houses have long been popular for ghost stories. All those rooms and secret passageways, plus guilty family secrets. A haunted 1-bedroom condo apartment doesn't have the same cachet.

"John Carroll's Thaumaturgy" by Frank Woodbridge (1903 July, THE BLACK CAT, available as a free pdf from www.archive.org) began with a family feud over an estate in southern Indiana that included a mansion and large farm. The matter went to court and after a protracted legal struggle, the Whitworth family gained control and the Carrolls were evicted.

John Carroll, the remaining heir, lived quietly in the village. Eventually the Whitworth mansion began to suffer hauntings. Red devils, they were called, which flitted into the house at night and gave the occupants no rest. Pistol shots could not bring them down.

The explanation eventually came. Hidden in a nearby cliff was the lair of Carroll, inside which he had an optical projector connected to a telescope. The images of the red devils were created there, then shone into the manor house. The plan was to scare away the Whitworths and take back the land for the Carrolls.

"The Revealing Pattern" by Alvin Heiner (1952 May, WORLDS OF IF, available as a free pdf from www.archive.org) was more an extended vignette than a plotted story.

Characters discussed the Reamer mansion, which had a long history of mysterious deaths. No one seemed to be able to occupy the mansion for long without being driven to suicide, having a heart attack while moving into the house, or falling down the stairs. No two victims died the same way. Having told all that, the story ended abruptly with no resolution.

Haunted Houses: Old-Time Radio.

THE ADVENTURES OF TOPPER was a summer replacement series that ran in 1945 from June to September, written by Stanley Wolf. It was based on the successful movies, which in turn were based on the bestselling novel by Thorne Smith. In later years, the story was successfully transferred to television.

Cosmo and Melvena Topper had bought a house from the estate of George and Marion Kerby, who had been killed in a car crash nearby along with their alcoholic St Bernard dog Neal. Their ghosts haunted the house but only Cosmo could hear and see them, which set up all sorts of humorous situations.

The actor Roland Young played Topper but sounded like a drunken Englishman with a mouthful of marbles. The comedy was mildly amusing at best. The episodes were performed before a live audience but their presence was only heard occasionally when several of the more boisterous members chuckled heartily. Matters were not helped by the orchestra constantly stepping on the actors' lines with incidental music.

“Topper Observed By Two Psychiatrists” aired on 1945-07-05. In this episode, Cosmo Topper's problems began with the maid threatening to quit because the telephone wasn't working properly. She relied on it for her social life, and good help was hard to get during the war. His wife Melvena was worried about him because she kept hearing him talking to himself. He tried to explain about George and Marion Kerby but she found his story difficult to believe.

For that reason, she hired the psychiatrist Dr Schwartzkopf to observe him. When the shrink arrived, Cosmo assumed he was the telephone repairman. This set up some misunderstandings that managed to stir up small bursts of laughter from the audience.

The real repairman was admitted separately by the maid, examined the telephone, and then reported to Melvena. She hadn't seen Schwartzkopf arrive and assumed the repairman was the psychiatrist. He told her that everything was a mess and the wires were definitely crossed.

Cosmo and Melvena talked later, each with the wrong impression from the wrong man. She said he needed a quiet rest in a sanitarium. The Kerbys were nonplused when he began ignoring them and called them hallucinations.

When the Kerbys were by themselves, they discussed what to do. The situation was complicated by the arrival of Dr Glockenspiel to provide a second opinion at the request of Schwartzkopf. Cosmo made no secret of the ghosts and mentioned he was in love with Marion.

As he talked with the two psychiatrists, the door to the room opened and closed by itself. This rattled the shrinks but they rationalized it as a draft. Then a trumpet began playing itself. A picture floated off the wall and smashed Glockenspiel on the head. A chair went after Schwartzkopf. Both men fled the house.

In the epilogue, the Toppers were having breakfast the next morning and discussing a newspaper report. The two psychiatrists had committed each other to sanitariums. The good news for the Toppers was that the telephone had been repaired.

“Mother-In-Law Visits” aired on 1945-08-30. The old biddy was coming to visit for two weeks, which didn't please Cosmo Topper. Melvena thought he was catching cold because she heard sneezing. The sound was actually coming from George Kerby.

How a ghost could catch cold was not satisfactorily explained. The two wound up in the same sickbed at the insistence of Marion. Melvena wondered why Cosmo was sleeping on the right side of the bed instead of the centre. Dr Blight was summoned. From there the usual sitcom complications and misunderstandings were developed. Eventually George was able to frighten off the physician and then recover his health.

The impending visit of Melvena's mother was the next woe. The Kerbys convinced Cosmo to fake his death, which understandably upset Melvena. The undertaker was next to be confused when the corpse began arguing with him. The mortician departed through the window.

Dr Blight returned and this time diagnosed Cosmo with measles. This meant a two-week quarantine that put the kibosh on Mother-in-law's visit. All was well except Cosmo.

As a whole, the series was mildly amusing. The writing and plots were ordinary, mostly the typical stuff seen on countless television sitcoms, with or without ghosts. Worth listening to once.

BOSTON BLACKIE aired on old-time radio from 1944 to 1950, and was also a series of 14 movies. His real name was Horatio Black but everyone, including his girlfriend Mary Wesley, called him Blackie. The shows are leavened with humour and quips.

Blackie had been a jewel thief in Boston and was supposedly reformed now that he lived in New York City. Supposedly, because he had no day job and took no fees as an amateur detective, yet lived well in a nice apartment and squired Wesley around to the fanciest nightclubs.

Blackie's nemesis was NYPD Homicide Inspector Farraday. The name was originally spelt in the usual way with one 'r' but after the series got going for some reason the extra letter was added.

In the early episodes of the series, Farraday would arrest Blackie on sight, then gather evidence to fit him. Over time their relationship moderated to being sparring partners. Blackie liked to barge into hot cases and race Farraday to the solution, while Farraday always had the snappiest lines.

"The Worthington Ghost" was a 1946 episode. Boston Blackie's friend Shorty was walking past a mansion when a woman, later identified as Madeleine Burns the maid, ran out screaming about a ghost. Naturally he took her to Blackie's apartment. She was still hysterical, so Mary Wesley was summoned to look after her since she was a nurse.

Blackie telephoned Inspector Farraday, who hung up on him when the ghost was mentioned. Blackie and Shorty went to the mansion where they met Margaret Worthington, a retired concert pianist. They left Wesley behind to look after Burns, who had been put to bed to get some sleep.

Worthington said that other than Burns she lived alone. She had a nephew Ernest Kleeland but didn't like him. The maid's behaviour didn't faze her and she was unconcerned about the incident or even the whereabouts of Burns.

Returning home, Blackie and Wesley looked in on Burns and found her dead, without a mark or apparent cause. They barely had time to check her pulse before Worthington telephoned, hysterical about a ghost. From there, many excursions and not just figuratively. Everyone hustled back and forth between the venues, except the dead woman of course. Worthington had gone insane and was found plinking away on the piano in her mansion.

The nephew arrived and was incredulous. He was angry because Worthington had cut him out of her will ten years ago. The police learned Blackie's pal Charlie Kingston had been trying to buy the mansion. That was a motive good enough for Farraday to accuse Blackie.

Worthington and Wesley, left together in the mansion momentarily, heard the voice of the ghost. It was a stunt by Blackie to force Worthington to admit she had been faking her insanity. She wouldn't explain her motive to Blackie.

Kleeland was the next victim, or so Worthington was told. That led her to say that he had been pressuring her to change her will. He wasn't really dead and was brought to the mansion by the police. At that point the story abruptly ended. No charges laid and so on to the closing music.

Technically Farraday couldn't run anyone in. Worthington didn't file a complaint against her nephew, and the maid died of natural causes from fright. A clear case of the writer running out of time or ideas to finish the story.

THE NEW ADVENTURES OF MICHAEL SHAYNE aired on old-time radio from 1944 to 1953. The series was based on the novels by Brett Halliday, although the episodes were pastiches. Michael Shayne began as a series of novels by Davis Dresser, writing under the pseudonym of Brett Halliday.

As a fictional detective, Shayne appeared not only in print but as an old-time radio series, movies, television, and a mystery fiction digest. Dresser quit writing Shayne stories after 1958 but farmed out the Halliday pseudonym as a house name to other writers, so the stories continued to appear for decades afterwards.

From 1944 to 1948 on radio, Shayne was located in San Francisco and had a pretty secretary named Phyllis Knight. Wally Maher voiced Shayne as a relatively sedate and average detective.

From 1948 to 1950, Shayne lived in New Orleans without a secretary. He was voiced by Jeff Chandler, who narrated the show in tones of rising hysteria, even if he was just crossing the street. That period could best be described as frenetic. Thereafter a variety of forgettable actors portrayed him.

"The Haunted House" was a 1945 episode written by Richard de Graffe. It was from the San Francisco series, although Michael Shayne and Phyllis Knight

were two hours drive east of the city in the village of Moccasin Hill. The episode opened with Shayne talking on the telephone to Inspector Faraday. No, not the one in New York City who tangled regularly with Boston Blackie. I'm guessing it was spelled with one 'r'.

Shayne had been hired to investigate a haunted house where an elderly millionaire named Kilgallon had supposedly died of fright after seeing a ghost. His daughter Ellen wanted to know otherwise, particularly since accidents were happening to her that she thought might be attempts on her life. Her cousin John Heinz of Boston was the other heir.

She, in wide-eyed innocence, assured Shayne that Heinz would never have tried to kill her or her father. She intended to sell the place. Heinz had sent in a lowball bid of \$20,000, much too cheap for the big house. As a result, Shayne immediately suspected Heinz. Not good detecting, since the evidence should be collected first, then matched to a list of suspects.

The next character was an elderly handyman named Dick. He was quick to peddle legends of the ghost. Shayne had reason to believe otherwise since he took a bad fall on some stairs. Afterwards he noticed the boards had been sawed half through. Ghosts don't do carpentry. While Shayne was dusting himself off, the estate lawyer Steven Patton arrived. His offer was \$22,500 but Ellen wasn't that naive and felt it was worth double.

Also doubling were the number of characters, such as a new gardener Fred Norman, who did little. There was news from the SFPD that John Heinz came in from Boston just before the old man died and then hurriedly departed just after his death.

Shayne suspected that the mansion had secret rooms and passageways, and went to work with a tape measure. He found a hidden room with indications of treasure, loot from a stagecoach robbery 70 years ago.

Clues and characters multiplied, making Ellen complain about all the traffic. Faraday arrived from San Francisco, out of his jurisdiction. Probably to save on characters, as otherwise some local Deppity Dawgs would have to be added.

John Heinz arrived. Knight noticed he had airline tickets in the name of Gene Powers. Before that could be questioned, a gunshot sounded and Patton was found dead in the driveway. With six minutes to go in the episode Shayne

convened a J'accuse! meeting in the drawing room. He tricked old Dick into confessing, but if the motive was explained, then I missed it. The music didn't help. Background and incidental music was lush, something you'd expect an orchestra to play in the rooftop Palm Garden room of a hotel.

LET GEORGE DO IT aired on radio from 1946 to 1954, sponsored by Standard Oil. The series was about George Valentine, a private investigator. He solicited clients with a running newspaper classified advertisement in the Personals column that he cited in the opening credits: *Danger's my stock in trade. If the job's too tough for you to handle, you've got a job for me. Write full details.*

Valentine's secretary/girlfriend was Claire Brooks, whom everyone called Brooksie. Her main function was to act as a sounding board for Valentine and have the plot explained to her at intervals.

"The Ghost On Bliss Terrace" was a 1948 episode written by David Victor and Herbert Little Jr. The client was Mrs Angela McCullough. She and her neighbours were worried that a vacant house on Bliss Terrace was occupied by a ghost. They chipped in together to pay George Valentine's fee.

He and Claire Brooks talked to McCullough. She told them that residents had seen faces in the windows. Sam Mitchell had been the house's previous occupant, murdered about a month ago. That case was still unsolved.

They visited the police to get the details. Mitchell had been a railroad employee about to retire when he was bludgeoned to death. His wife had been away at the time. Nothing was stolen and there was no apparent motive.

Valentine and Brooksie interviewed those who saw the ghost. Mrs Mitchell was a tiny woman, a dingbat who refused to remain in the house after the murder. She mentioned how she had wanted to go traveling but was now stuck with a house she couldn't sell or rent. She gave them the key and they staked out the house.

While prowling the premises, Valentine was slugged in the dark kitchen. His assailant vanished but still had to be inside. Valentine found a wood stove poker with blood on it. Not his but Sam's. That brought the police back for another round of investigation.

Returning to the house, they found Mrs Mitchell babbling about the place. She said a mandolin given to her when she married was missing. The man who gave it to her was Paul Hutt, a good friend indeed. The police brought in a psychiatrist who stirred her up and got her to admit Hutt had been her only true love.

The penny dropped for Valentine. He and Sam were tall men and it was impossible for Mrs Mitchell to have attacked them. The logical decision was to physically tear the house apart in search of secret rooms or passageways. Brooksie found a man crouched in a hideyhole. He was indeed Hutt and confessed to murdering Sam in a jealous rage, then hiding out in the house. The ghost of Bliss Terrace evaporated.

RICHARD DIAMOND, PRIVATE DETECTIVE aired on radio from 1949 to 1952 as a star vehicle for singer Dick Powell, who was trying to make a transition from crooner to actor. Private detective Richard Diamond, supported by his rich girlfriend Helen Asher, was an average investigator.

His gimmick was that at the end of each episode he would serenade Asher with a romantic ballad in his rich voice. If they were in his apartment, the next-door neighbour would complain in loud counterpoint to Diamond's singing, a very funny running gag through the series. Diamond and Asher were night people, so they constantly woke up the neighbour out of his sleep.

The dialogue attempted to be snappy and witty but generally came off as smarmy. Diamond was played as a happy-go-lucky detective who got on well with the police. Noir, it wasn't.

"The House Of Mystery Case" was a 1949 episode, written by Herb Purdum. The widow Julia Bates arrived at Diamond's office. Her late husband had been an occultist who built a house full of secret passages and rooms. His will stipulated that Julia was to live in the house for three months following his death, which time period would expire the next day. If she didn't, the money would go to a charity.

Julia was afraid she wasn't going to make it. She found evidence of an intruder living in the house, possibly hiding out inside a basement crypt. She was afraid she wouldn't live to collect her inheritance and wanted Diamond to act as a body guard overnight.

Upon arrival he was met by the butler Cain, who, unprompted, said he was the seventh son of a seventh son. Diamond wittily asked him how his brother was doing, but Cain missed that joke. "*The dead are restless tonight*", said Cain. He was a pretty funny butler who had the best lines throughout the episode.

A storm broke out around the mansion. Creaking noises, ghostly presences, fresh blood stains, and all the usual impedimenta of a traditional big house. Alarums abounded. The crypt was open. The husband's voice was heard threatening Julia.

Diamond called in the police and the hunt was on. Julia wanted to leave even though she would forfeit her inheritance. The police wouldn't let her depart. They found a blood-stained dummy designed to frighten. It became evident that an intruder was working hard to scare Julia out of her mind.

The rational explanation having been established, the next step was to find whoever it was roaming along the secret passages. They kept vigil and when the ghost appeared, ran him to ground. He was the estate lawyer and executor, who had set up the dummy charity which would enable him to live well on the money.

With five minutes left, that gave Diamond a chance to return home and serenade Asher. A funny episode, with Cain taking the spotlight. Worth listening to.

THE HALL OF FANTASY was an anthology old-time radio series that aired for the 1952-53 season. The episodes were written by Richard Thorne, who also directed the episodes and often played characters. The shows were a mixture of supernatural and mystery stories.

"The Black Figurine Of Death" was a 1953 episode set in the mansion of Amos Johnson, a rich old geezer on his deathbed. Gathered around him for his grand finale were his heirs, Joyce, David, and Harold. Amos was holding a black figurine in his hand at the moment of death.

He told them they would share equally in his estate, subject to the condition that they live together in the mansion for one year from his death. If any of them died, that share would be distributed among the survivors. In other words, the listener can see the plot coming.

However, it didn't work out that way at the start. The funeral was held and Amos was interred in the family mausoleum beside the mansion. The three heirs settled in to wait for their inheritance. The executor and family lawyer Carl Sawyer also hung about to keep an eye on them.

First the housekeeper came to David and told him she had found the figurine in her bedroom. Pish-posh and all that, said David, and sent her on her way. A short time later she was found dead, strangled. The alarms kicked into full gear.

Half the cast had scenes in the mausoleum at one time or another, always at 03h00 on a moonless night, serenaded by screams. Just once I'd like to see a horror drama set at high noon in the cemetery.

Sawyer was the most suspicious character, but in accordance with traditional mystery plots, he became the second victim, shot dead. Then Harold did some screaming and vanished in the general direction of the mausoleum. Joyce and David chased after him for the final confrontation.

Harold did some bwah-ha!-ha!-ing and explained he was going to kill Joyce and David in such a way as to make it look as if one of them had engendered the murders to get all of the inheritance.

At this moment, some handwaving was inserted and Harold may or may not have been killed by the avenging ghost of Amos. Or, in the alternative, he may have slipped and fallen. The ending was left ambiguous.

"The Twisting Weeds Of Death" was a 1953 episode, a standard haunted house mystery. The big house, perched on a cliff above the ocean, had been closed for twenty years after an elderly woman had been murdered and her niece Elaine Scott vanished. Then the young woman's ghost began appearing.

Scott's ghost had long seaweed for hair, and left a mess everywhere it went. Seawater puddled in the rooms and fragments of seaweed clung to the furniture. She screamed at random in very piercing tones. Not a good house guest. The ghost appeared to be trying to communicate something, pointing vaguely and moaning that this was where it happened.

After much to-ing and fro-ing about the house, the sheriff, the young hero, and a supporting character named Doc converged at the house during a crashing

storm at midnight. Nobody ever searched a haunted mansion on a lovely summer afternoon without a cloud in the sky. They dug in the basement and found the bones of Scott. The sheriff accused Doc of the murder. Since there was no evidence that could be admitted in court to prove he was the culprit, the problem was solved by Doc confessing all.

He had asked Scott to marry him. She not only refused but laughed in his face. He went berserk in anger, killed her, and buried her in the basement. The aunt was a potential witness, so he killed her but didn't have time to hide the body before house guests arrived.

Having made his confession, Doc bolted for freedom. Instead of running inland, he took a footpath along the edge of the cliff and fell to his death in the raging storm. That saved the sheriff the difficulty of putting together a case for prosecution.

One thing bothered me. Scott had been killed inside the house and buried in the basement. Yet her ghost was dripping seawater and dropping seaweed fragments everywhere she went. It would have made sense had she been thrown in the ocean but not for something that took place inland.

Cozy Haunted Houses.

A cozy series set in a haunted house came from the keyboard of Kate Kingsbury (pseudonym of Doreen Roberts Hight). It was set in Sully's Landing on the Oregon coast. Melanie West was the protagonist, recently divorced and fleeing the big city of Portland. She and her grandmother Elizabeth Harris bought an old house and renovated it into a bed-and-breakfast. The villagers said it was haunted by a laughing ghost, so the house was named the Merry Ghost Inn.

DEAD AND BREAKFAST (2017) began with the women stripping old walls out of a bedroom. Inside a wall they found a skeleton, which police believed to be the wife of the previous owner. The grand opening receded further into the distance when another fresher body was found, a woman who resembled West.

Threats were received, the house was torched, and it became obvious the murderer was trying to frighten away West and Harris. There were problems with the ghost, who made the house feel chilly no matter how warm the thermostat was set.

The killer was the one responsible for the skeleton back when and the more recent killing, as well as the attacks on West. The first killing was a love triangle gone wrong, and everything that followed were attempts to tie off loose threads. After the denouement, the inn prepared to open. The ghost was named Orville for want of any better information.

DOOM WITH A VIEW (2017) was the sequel. Melanie West and her grandmother were celebrating the grand opening of the Merry Ghost Inn. Their first guests were a book club of six readers. One of them didn't make it past Chapter 1, when someone sawed through a balcony railing and Walter Dexter fell to his death. It wasn't Orville the ghost's fault.

The five other club members were strangers, so West had her Marpleing cut out for her. Unlike most Miss Marples in other cozies, West knew how to use Google, which sometimes helped in her investigating. In the denouement, Dexter's past life had caught up to him. Another member of the club was the widow of a man Dexter had embezzled from and driven to suicide.

The finale was the discovery that the ghost they had been calling Orville was really that of an artist named Arthur Mansfield. West and her grandmother decided to keep calling it Orville. The ghost laughed heartily at that.

BE OUR GHOST (2018) had the Merry Ghost Inn operating but the action shifted elsewhere. The village was up in arms over the plans of real estate developer Jason Northwood to build a loud and noisy mega-arcade in the historic centre. The reader does not have to read the blurb to guess who the first murder victim would be.

After Northwood was sent off with extreme prejudice, Melanie West and her granny were on the case. Politics in villages can be as corrupt as anything in the big city. There were old family feuds, with Elizabeth Harris in the midst of one, and just plain bad manners all around.

The murderer had suffered at the hands of Northwood in his past life. His arrival in the village perturbed her to no end. After killing him, she had to stop that nosy Miss Marple and her Grandmother, but failed. Since the killer was the mayor of the village, that opened a vacancy on the council.

SEEN IN THE LITERATURE

Wada, K., et al (2020-07-30) **Formation of blanets from dust grains around the supermassive black holes in galaxies.** [www.arXiv.org arXiv:2007.15198v1 \[astro-ph.EP\]](https://arxiv.org/abs/2007.15198v1) (available as a free pdf)

Authors' abstract: *In Wada, Tsukamoto, and Kokubo (2019), we proposed for the first time that a new class of planets, blanets (i.e., black hole planets), can be formed around supermassive black holes (SMBHs) in the galactic center.*

Here, we investigate the dust coagulation processes and physical conditions of the blanet formation outside the snowline ($r_{\text{snow}} \sim$ several parsecs) in more detail, especially considering the effect of the radial advection of the dust aggregates.

We found that the viscous alpha-parameter in the turbulent circumnuclear disk should be smaller than 0.04, to prevent the destruction of the aggregates due to collisions. The formation timescale of blanets T_{GI} at r_{snow} is, $T_{\text{GI}} \sim 70\text{-}80$ megayears for $\alpha = 0.01$ to 0.04 and $M_{\text{BH}} = 10^6 M_{\odot}$.

The mass of the blanets ranges from $20 M_{\text{E}}$ to $3000 M_{\text{E}}$ in $r < 4 \text{ pc}$ for $\alpha = 0.02$ (M_{E} is the Earth mass), which is in contrast with $4M_{\text{E}}$ to $6M_{\text{E}}$ for the case without the radial advection. Our results suggest that blanets could be formed around relatively low-luminosity active galactic nuclei ($L_{\text{bol}} \sim 10^{42} \text{ erg s}^{-1}$) during their lifetime ($< 10^8 \text{ yr}$).

Once 10 to 100 metre sized aggregates are formed, they decouple from gas turbulence, and as a result, the aggregate layer becomes gravitationally unstable, leading to the formation of planets due to the fragmentation of the layer, with ten times the mass of the earth.

The objects orbit the SMBHs with an orbital time of 105 to 106 years. To distinguish them from standard planets, we hereafter call these hypothetical astronomical objects blanets (i.e., black hole planets).

Morbidelli, A., et al (2020) **No evidence for interstellar planetesimals trapped in the Solar system.** MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 497:10.1093/mnras/slaa111 (available as a free pdf)

Authors' abstract: *In two recent papers published in MNRAS, Namouni and Morais claimed evidence for the interstellar origin of some small Solar system bodies, including: (i) objects in retrograde coorbital motion with the giant planets and (ii) the highly inclined Centaurs.*

Here, we discuss the flaws of those papers that invalidate the authors' conclusions. Numerical simulations backwards in time are not representative of the past evolution of real bodies. Instead, these simulations are only useful as a means to quantify the short dynamical lifetime of the considered bodies and the fast decay of their population.

In light of this fast decay, if the observed bodies were the survivors of populations of objects captured from interstellar space in the early Solar system, these populations should have been implausibly large (e.g. about 10 times the current main asteroid belt population for the retrograde co-orbital of Jupiter).

More likely, the observed objects are just transient members of a population that is maintained in quasi-steady state by a continuous flux of objects from some parent reservoir in the distant Solar system. We identify in the Halley-type comets and the Oort cloud the most likely sources of retrograde co-orbitals and highly inclined Centaurs.

Domokos, G., et al (2020) **Plato's cube and the natural geometry of fragmentation.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:18178-18185

Authors' abstract: *We live on and among the by-products of fragmentation, from nanoparticles to rock falls to glaciers to continents. Understanding and taming fragmentation is central to assessing natural hazards and extracting resources, and even for landing probes safely on other planetary bodies.*

In this study, we draw inspiration from an unlikely and ancient source: Plato, who proposed that the element Earth is made of cubes because they may be

tightly packed together. We demonstrate that this idea is essentially correct: Appropriately averaged properties of most natural 3D fragments reproduce the topological cube.

We use mechanical and geometric models to explain the ubiquity of Plato's cube in fragmentation and to uniquely map distinct fragment patterns to their formative stress conditions.

Plato envisioned Earth's building blocks as cubes, a shape rarely found in nature. The solar system is littered, however, with distorted polyhedra-shards of rock and ice produced by ubiquitous fragmentation.

We apply the theory of convex mosaics to show that the average geometry of natural two-dimensional fragments, from mud cracks to Earth's tectonic plates, has two attractors: "Platonic" quadrangles and "Voronoi" hexagons.

In three dimensions, the Platonic attractor is dominant: Remarkably, the average shape of natural rock fragments is cuboid. When viewed through the lens of convex mosaics, natural fragments are indeed geometric shadows of Plato's forms.

Simulations show that generic binary breakup drives all mosaics toward the Platonic attractor, explaining the ubiquity of cuboid averages. Deviations from binary fracture produce more exotic patterns that are genetically linked to the formative stress field. We compute the universal pattern generator establishing this link, for 2D and 3D fragmentation.

Kaplan, M., and S. Cengiz (2020) **Horseshoe co-orbitals of Earth: current population and new candidates.** MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 496:4420-4432

[Trojan asteroids orbit just ahead or just behind a planet, following the same path. The vast majority are in Jupiter's orbit.]

Authors' abstract: *Most co-orbital objects in the Solar system are thought to follow tadpole-type orbits, behaving as Trojans. However, most of Earth's identified co-orbitals are moving along horseshoe-type orbits. The current tally of minor bodies considered to be Earth co-orbitals amounts to 18; of them, 12 are horseshoes, 5 are quasi-satellites, and 1 is a Trojan. The semimajor axis*

values of all these bodies librate between 0.983 and 1.017 AU. [One astronomical unit equals the distance between Earth and the Sun.]

In this work, we have studied the dynamical behaviour of objects following orbits with semimajor axis within this range that may be in a 1:1 mean-motion resonance with Earth. Our results show that asteroids 2016 CO₂₄₆, 2017 SL₁₆, and 2017 XQ₆₀ are moving along asymmetrical horseshoe-type orbits; the asteroid 2018 PN₂₂ follows a nearly symmetric or regular horseshoe-type orbit.

Asteroids 2016 CO₂₄₆, 2017 SL₁₆, and 2017 XQ₆₀ can remain in the horseshoe co-orbital state for about 900, 3300, and 2700 yr, respectively. Asteroid 2018 PN₂₂ has a more chaotic dynamical behaviour; it may not stay in a horseshoe co-orbital state for more than 200 yr. The horseshoe libration periods of 2016 CO₂₄₆, 2017 SL₁₆, 2017 XQ₆₀, and 2018 PN₂₂ are 280, 255, 411, and 125 yr, respectively.

von Hegner, Ian (2020) **Interplanetary transmissions of life in an evolutionary context.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 19:335-348

Author's abstract: The theory of lithopanspermia proposes the natural exchange of organisms between solar system bodies through meteorites. The focus of this theory comprises three distinct stages: planetary ejection, interplanetary transit and planetary entry.

However, it is debatable whether organisms transported within the ejecta can survive all three stages. If the conjecture is granted, that life can indeed be safely transmitted from one world to another, then it is not only a topic pertaining to planetary science but also biological sciences. Hence, these stages are only the first three factors of the equation.

The other factors for successful lithopanspermia are the quality, quantity and evolutionary strategy of the transmitted organisms. When expanding into new environments, invading organisms often do not survive in the first attempt and usually require several attempts through propagule pressure to obtain a foothold.

There is a crucial difference between this terrestrial situation and the one brought about by lithopanspermia. While invasive species on Earth repeatedly

enters a new habitat, a species pragmatically arrives on another solar system body only once; thus, an all-or-nothing response will be in effect. The species must survive in the first attempt, which limits the probability of survival.

In addition, evolution sets a boundary through the existence of an inverse proportionality between the exchanges of life between two worlds, thus further restricting the probability of survival. However, terrestrial populations often encounter unpredictable and variable environmental conditions, which in turn necessitates an evolutionary response.

Thus, one evolutionary mode in particular, bet hedging, is the evolutionary strategy that best smooth out this inverse proportionality. This is achieved by generating diversity even among a colony of genetically identical organisms. This variability in individual risk-taking increases the probability of survival and allows organisms to colonize more diverse environments.

The present analysis to understand conditions relevant to a bacterial colony arriving in a new planetary environment provides a bridge between the theory of bet hedging, invasive range expansion and planetary science.

Speirs: What I never liked about the idea of panspermia, that Earth life was seeded from outer space, is that it doesn't answer the question of how life originated. It only pushes the problem back one step. Further, any mechanism that would explain how life originated elsewhere could just as easily apply to Earth.

Wan, B., et al (2020) **Seismological evidence for the earliest global subduction network at 2 Ga ago.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.abc549 (available as a free pdf)

Authors' abstract: The earliest evidence for subduction, which could have been localized, does not signify when plate tectonics became a global phenomenon. To test the antiquity of global subduction, we investigated Paleoproterozoic time, for which seismic evidence is available from multiple continents.

We used a new high-density seismic array in North China to image the crustal structure that exhibits a dipping Moho bearing close resemblance to that of the modern Himalaya. The relict collisional zone is Paleoproterozoic in age and implies subduction operating at least as early as ~2 billion years (Ga) ago.

Seismic evidence of subduction from six continents at this age is interpreted as the oldest evidence of global plate tectonics. The sutures identified can be linked in a plate network that resulted in the assembly of Nuna, likely Earth's first supercontinent. Global subduction by ~2 Ga ago can explain why secular planetary cooling was not appreciable until Proterozoic time.

Mehra, A., et al (2020) **Three-dimensional reconstructions of the putative metazoan Namapoikia show that it was a microbial construction.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:19760-19766

Authors' abstract: *Animals that build skeletons have an outsized impact on Earth's biological, geochemical, and sedimentological cycles. To determine when, where, and why metazoan biomineralization first emerged, it is necessary to study the earliest record of skeletal animals.*

This record is made up of four genera from the Ediacaran period: Namacalathus, Cloudina, Sinotubulites, and Namapoikia. Here, we measure three-dimensional reconstructions of Namapoikia to test the hypothesis that it is a calcifying sponge. We find that Namapoikia lacks the physical characteristics expected of a sponge, or, for that matter, an animal.

Strata from the Ediacaran Period (635 million to 538 million years ago) contain several examples of enigmatic, putative shell-building metazoan fossils. These fossils may provide insight into the evolution and environmental impact of biomineralization on Earth, especially if their biological affinities and modern analogs can be identified.

Recently, apparent morphological similarities with extant coralline demosponges have been used to assign a poriferan affinity to Namapoikia rietoogensis, a modular encrusting construction that is found growing between (and on) microbial buildups in Namibia.

Here, we present three-dimensional reconstructions of Namapoikia that we use to assess the organism's proposed affinity. Our morphological analyses, which comprise quantitative measurements of thickness, spacing, and connectivity, reveal that Namapoikia produced approximately millimeter-thick meandering and branching/merging sheets.

We evaluate this reconstructed morphology in the context of poriferan biology and determine that Namapoikia likely is not a sponge-grade organism.

Buatois, L.A., et al (2020) **Quantifying ecospace utilization and ecosystem engineering during the early Phanerozoic: The role of bioturbation and bioerosion.** SCIENCE ADVANCES 6:eabb0618 (available as a free pdf)

Authors' abstract: *The Cambrian explosion (CE) and the great Ordovician biodiversification event (GOBE) are the two most important radiations in Paleozoic oceans. We quantify the role of bioturbation and bioerosion in ecospace utilization and ecosystem engineering using information from 1367 stratigraphic units.*

An increase in all diversity metrics is demonstrated for the Ediacaran-Cambrian transition, followed by a decrease in most values during the middle to late Cambrian, and by a more modest increase during the Ordovician. A marked increase in ichnodiversity and ichnodisparity of bioturbation is shown during the CE and of bioerosion during the GOBE.

Innovations took place first in offshore settings and later expanded into marginal-marine, nearshore, deep-water, and carbonate environments. This study highlights the importance of the CE, despite its Ediacaran roots.

Differences in infaunalization in offshore and shelf paleoenvironments favor the hypothesis of early Cambrian wedge-shaped oxygen minimum zones instead of a horizontally stratified ocean.

Speirs: The oldest recognized and accepted fossils are those of microbes from 1.38 billion years ago. For the next 700 million years, not an awful lot of evolution happened. Then suddenly, as the Ediacaran period began 600 megayears ago, multicellular organisms appeared. When the Cambrian began 542 megayears ago, BLAM!, there was a massive burst of speciation among plants and animals as the first burrowers and predators appeared. Life was never the same after that.

Bradley, J.A., et al (2020) **Widespread energy limitation to life in global subseafloor sediments.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aba0697 (available as a free pdf)

Authors' abstract: *Microbial cells buried in subseafloor sediments comprise a substantial portion of Earth's biosphere and control global biogeochemical cycles; however, the rate at which they use energy (i.e., power) is virtually unknown. Here, we quantify organic matter degradation and calculate the power utilization of microbial cells throughout Earth's Quaternary-age subseafloor sediments.*

Aerobic respiration, sulfate reduction, and methanogenesis mediate 6.9, 64.5, and 28.6% of global subseafloor organic matter degradation, respectively. The total power utilization of the subseafloor sediment biosphere is 37.3 gigawatts, less than 0.1% of the power produced in the marine photic zone.

Aerobic heterotrophs use the largest share of global power (54.5%) with a median power utilization of 2.23×10^{-18} watts per cell, while sulfate reducers and methanogens use 1.08×10^{-19} and 1.50×10^{-20} watts per cell, respectively. Most subseafloor cells subsist at energy fluxes lower than have previously been shown to support life, calling into question the power limit to life.

Marine sediments harbor a vast number of microorganisms across a wide range of depositional settings. These microorganisms have been shown to survive for extraordinarily long periods of time.

Contrary to life at Earth's surface, subsurface organisms are severely energy limited. Many of these sediment-dwelling microbes are novel and uncultured and survive under extreme energy limitation for millennia, thus calling into question the limit for life. They are also responsible for degrading Earth's largest pool of organic carbon, exerting a major control on global climate and biogeochemical cycles.

Sereno, M.I., et al (2020) **The human cerebellum has almost 80% of the surface area of the neocortex.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:19538-19543

Authors' abstract: *The cerebellum has long been recognized as a partner of the cerebral cortex, and both have expanded greatly in human evolution. The thin*

cerebellar cortex is even more tightly folded than the cerebral cortex. By scanning a human cerebellum specimen at ultra-high magnetic fields, we were able to computationally reconstruct its surface down to the level of the smallest folds, revealing that the cerebellar cortex has almost 80% of the surface area of the cerebral cortex.

By performing the same procedure on a monkey brain, we found that the surface area of the human cerebellum has expanded even more than that of the human cerebral cortex, suggesting a role in characteristically human behaviors, such as toolmaking and language.

The surface of the human cerebellar cortex is much more tightly folded than the cerebral cortex. It was computationally reconstructed for the first time to the level of all individual folia from multicontrast high-resolution postmortem MRI scans. Its total shrinkage-corrected surface area (1,590 cm²) was larger than expected or previously reported, equal to 78% of the total surface area of the human neocortex.

The unfolded and flattened surface comprised a narrow strip 10 cm wide but almost 1 m long. By applying the same methods to the neocortex and cerebellum of the macaque monkey, we found that its cerebellum was relatively much smaller, approximately 33% of the total surface area of its neocortex. This suggests a prominent role for the cerebellum in the evolution of distinctively human behaviors and cognition.

Wadley, L., et al (2020) **Fire and grass-bedding construction 200 thousand years ago at Border Cave, South Africa.** SCIENCE 369:863-866

Authors' abstract: *The Border Cave site in the KwaZulu-Natal region of South Africa has been a rich source of archaeological knowledge about Stone Age humans because of its well-preserved stratigraphic record. We now report the discovery of grass bedding in Border Cave, dated to approximately 200,000 years ago.*

The bedding, identified with a range of microscopic and spectroscopic techniques, was mingled with layers of ash. It also incorporated debris from lithics, burned bone, and rounded ochre grains, all of which were of clear anthropogenic origin.

We speculate that the ash may have been deliberately used in bedding to inhibit the movement of ticks and other arthropod irritants. These discoveries extend the record of deliberate construction of plant bedding by at least 100,000 years.

Early plant use is seldom described in the archaeological record because of poor preservation. We report the discovery of grass bedding used to create comfortable areas for sleeping and working by people who lived in Border Cave at least 200,000 years ago.

Sheaves of grass belonging to the broadleafed *Panicoideae* subfamily were placed near the back of the cave on ash layers that were often remnants of bedding burned for site maintenance. This strategy is one forerunner of more complex behavior that is archaeologically discernible from ~100,000 years ago.

Speirs: Insects and arachnids do not have lungs but breathe through pores in their cuticle. Dust and ash clog the pores and in sufficient quantity will kill them.

Rivals, F., et al (2020) **Dramatic change in the diet of a late Pleistocene *Elasmotherium* population during its last days of life: Implications for its catastrophic mortality in the Saratov region of Russia.** PALAEOGEOGRAPHY, PALAEOCLIMATOLOGY, PALAEOECOLOGY 556:doi.org/10.1016/j.palaeo.2020.109898

Authors' abstract: *Mesowear reveals a grazing diet for the last months/year of life. Microwear suggests a browsing diet at the time of death (days/weeks). Discrepancy between the proxies indicates a shift in diet before death. This change in diet could be related to a catastrophic mortality event.*

The late Pleistocene site of Irgiz 1 (Saratov Region, Russia) has yielded an accumulation of giant rhinoceros (*Elasmotherium sibiricum*) within the deposits of an oxbow lake. Irgiz 1 is one of the few sites in the world with a significant amount of elasmothere individuals of different age groups.

Tooth mesowear and microwear are used to characterize the dietary traits of the giant rhinoceros on two temporal scales, the annual average diet and the diet at the time of death, respectively. Tooth mesowear, analyzed on 20 specimens, suggests a highly abrasive diet similar to that of extant grazers (similar to the extant white rhinoceros).

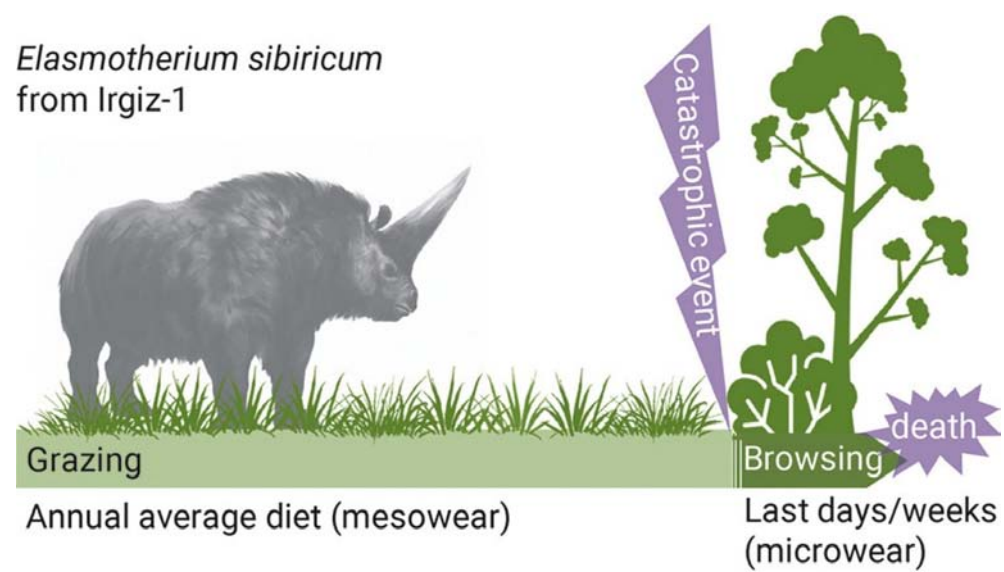
Tooth microwear analyzed on 16 specimens, conversely, indicates that *E. sibiricum* was a browser (feeding on leaves from shrubs and trees) at the time of death. The strong discrepancy between the results from the two dietary proxies and the very low variability of the microwear signal suggest that these animals may have died in an event of short duration.

The elasmotheres from the area around Irgiz 1 were grazers, but a catastrophic event, perhaps related to the significant accumulation of snow and/or ice coating ('dzud'), limited the availability of grass and forced them to shift toward shrub/tree foliage that was still accessible.

The combination of the two proxies, mesowear and microwear, allows the reconstruction of the dietary traits of *E. sibiricum*, but also to propose a hypothesis for death.

This first study of tooth meso- and microwear on elasmotheres provided unique data which allows us to broaden our knowledge about the diet of these animals. The findings indicate that the Irgiz 1 population of elasmotheres died in a single catastrophic event and that the fossil assemblage is not time-averaged.

[Image is from this paper.]



Ardelean, C.F., et al (2020) **Evidence of human occupation in Mexico around the Last Glacial Maximum.** NATURE 584:87-92

Authors' abstract: *The initial colonization of the Americas remains a highly debated topic, and the exact timing of the first arrivals is unknown. The earliest archaeological record of Mexico, which holds a key geographical position in the Americas, is poorly known and understudied. Historically, the region has remained on the periphery of research focused on the first American populations.*

However, recent investigations provide reliable evidence of a human presence in the northwest region of Mexico, the Chiapas Highlands, Central Mexico and the Caribbean coast during the Late Pleistocene and Early Holocene epochs.

Here we present results of recent excavations at Chiquihuite Cave, a high-altitude site in central northern Mexico, that corroborate previous findings in the Americas of cultural evidence that dates to the Last Glacial Maximum (26,500 to 19,000 years ago), and which push back dates for human dispersal to the region possibly as early as 33,000 to 31,000 years ago.

The site yielded about 1,900 stone artefacts within a 3-m-deep stratified sequence, revealing a previously unknown lithic industry that underwent only minor changes over millennia. More than 50 radiocarbon and luminescence dates provide chronological control, and genetic, palaeoenvironmental and chemical data document the changing environments in which the occupants lived.

Our results provide new evidence for the antiquity of humans in the Americas, illustrate the cultural diversity of the earliest dispersal groups (which predate those of the Clovis culture) and open new directions of research.

Marshall, Fiona (2020) **Cats as predators and early domesticates in ancient human landscapes.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:18154-18156

Author's abstract: *Cats have had diverse relationships with humans, ranging from rodent control, to household pets, to cultural icons. The presence of rodents in grain stores in Neolithic farming settlements is widely thought to have led to the domestication of cats. Felid bones are rare in archaeological*

sites, however, and processes of cat domestication and dispersal are not well understood.

A study by Krajcarz et al. in PNAS reports on the initial spread of Near Eastern cats (Felis silvestris lybica/Felis catus), from southwest Asia into Europe ~6,200 to 4,300 ya. Their unique data include Neolithic skeletal material from several Near Eastern cats found outside human settlements, and their analysis demonstrates that cats associated with early farmers in synanthropic or commensal relationships, hunting in agricultural landscapes.

By documenting ancient ecological relationships in humanly modified landscapes, this isotopic research contributes to understanding landscape scale human niche construction and to future directions in domestication research. The earliest cats discovered to date were buried in early agricultural settlements, and scholars have proposed commensal and mutualistic domestication pathways for their domestication.

Direct archaeological evidence for a commensal relationship between millet farmers and small felids feeding within the human food web was documented at Quanhucan in China (~5,560 to 5,280 ya), where leopard cats (Prionailurus bengalensis) hunted rodents in a farming village ecology and may have even been fed. However, this relationship did not lead to full domestication.

Radford, C., et al (2020) **Artificial eyespots on cattle reduce predation by large carnivores.** COMMUNICATIONS BIOLOGY 3:doi.org/10.1038/s42003-020-01156-0 (available as a free pdf)

Authors' abstract: *Eyespots evolved independently in many taxa as anti-predator signals. There remains debate regarding whether eyespots function as diversion targets, predator mimics, conspicuous startling signals, deceptive detection, or a combination. Although eye patterns and gaze modify human behaviour, anti-predator eyespots do not occur naturally in contemporary mammals.*

Here we show that eyespots painted on cattle rumps were associated with reduced attacks by ambush carnivores (lions and leopards). Cattle painted with eyespots were significantly more likely to survive than were cross-marked and unmarked cattle, despite all treatment groups being similarly exposed to predation risk.

While higher survival of eyespot-painted cattle supports the detection hypothesis, increased survival of crossmarked cattle suggests an effect of novel and conspicuous marks more generally. To our knowledge, this is the first time eyespots have been shown to deter large mammalian predators. Applying artificial marks to high-value livestock may therefore represent a cost-effective tool to reduce livestock predation.

[Image is from this paper. Left to right: eyespots, X marks as a variation, and unmarked cattle as a control.]



Speirs: I grew up on a cattle ranch in west-central Alberta. There were lots of coyotes about but I don't ever recall we lost calves to them. The cows were horned and certainly defended the offspring out on the range. I wish my father were still alive so I could show him this article. Laugh, he would.

Lawrence, Paul (2020) **Policing, ‘science’, and the curious case of Photo-FIT.** THE HISTORICAL JOURNAL 63:1007-1031

Author’s abstract: *This article analyses the curious development and subsequent refinement of the Photo-FIT system for the identification of criminal suspects, used by police forces around the world from the 1970s.*

Situating Photo-FIT in a succession of other technologies of identification, it demonstrates that, far from representing the onward march of science and technology (and the way in which both were harnessed to the power of the state in the twentieth century), Photo-FIT was the brainchild of an idiosyncratic entrepreneur wedded to increasingly outmoded notions of physiognomy.

Its adoption by the Home Office was primarily determined by the particular context of the later 1960s, and its continued use owed more to vested interest and energetic promotion than to scientific underpinnings or proven efficacy. It did, however, in the longer term, provide the impetus for the development of a

new sub-field of psychology and pave the way for the development of increasingly sophisticated facial identification technologies still used today.

Overall, the article demonstrates the long persistence of physiognomic thinking in twentieth-century Britain, the way in which new technology is socially constructed, and the persuasive power of ‘pseudo-science’.

Lehmann, D., et al (2020) **Pangolins and bats living together in underground burrows in Lopé National Park, Gabon.** AFRICAN JOURNAL OF ECOLOGY 58:540-542 (available as a free pdf)

[This article is illustrated with down-hole photographs of pangolins and bats sharing underground space. If you are interested in the origins of COVID-19, this is definitely worth downloading.]

Authors’ extracts: *In light of recent publications that indicate a link between pangolin and bat coronaviruses related to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), we believe that recent observations of pangolins and bats sharing burrows in Lopé, Central Gabon, is of general interest. Our observations were made during an ecological and spatial movement study of the giant pangolin, Smutsia gigantea.*

The fact that both giant and white-bellied pangolins in Lopé, Central Gabon, use burrows that are inhabited by several species of bats illustrates that there is frequent opportunity for pangolins to be exposed to bat-borne viruses.

Pangolins are also commonly found in game meat markets in Gabon and are sometimes sold alive demonstrating risk of viral infection to humans. Until the links between bat, pangolin and human coronaviruses are better understood we suggest that Gabon takes steps to stop people capturing, handling or eating wild bats or wild pangolins.

Venter, Z.S., et al (2020) **COVID-19 lockdowns cause global air pollution declines.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:18984-18990

Authors’ abstract: *The global response to the COVID-19 pandemic has resulted in unprecedented reductions in economic activity. We find that, after*

accounting for meteorological variations, lockdown events have reduced the population-weighted concentration of nitrogen dioxide and particulate matter levels by about 60% and 31% in 34 countries, with mixed effects on ozone. Reductions in transportation sector emissions are largely responsible for the NO₂ anomalies.

We test the hypothesis that this has reduced tropospheric and ground-level air pollution concentrations, using satellite data and a network of >10,000 air quality stations.

After accounting for the effects of meteorological variability, we find declines in the population-weighted concentration of ground-level nitrogen dioxide (NO₂: 60% with 95% CI 48 to 72%), and fine particulate matter (PM_{2.5}: 31%; 95% CI: 17 to 45%), with marginal increases in ozone (O₃: 4%; 95% CI: -2 to 10%) in 34 countries during lockdown dates up until 15 May.

Except for ozone, satellite measurements of the troposphere indicate much smaller reductions, highlighting the spatial variability of pollutant anomalies attributable to complex NO_x chemistry and long-distance transport of fine particulate matter with a diameter less than 2.5 µm (PM_{2.5}).

By leveraging Google and Apple mobility data, we find empirical evidence for a link between global vehicle transportation declines and the reduction of ambient NO₂ exposure. While the state of global lockdown is not sustainable, these findings allude to the potential for mitigating public health risk by reducing “business as usual” air pollutant emissions from economic activities.

Qin, J., et al (2020) Estimation of incubation period distribution of COVID-19 using disease onset forward time: A novel cross-sectional and forward follow-up study. SCIENCES ADVANCES 6:doi.org/10.1126/sciadv.abc1202 (available as a free pdf)

Authors’ abstract: We have proposed a novel, accurate low-cost method to estimate the incubation-period distribution of COVID-19 by conducting a cross-sectional and forward follow-up study. We identified those presymptomatic individuals at their time of departure from Wuhan and followed them until the development of symptoms.

The renewal process was adopted by considering the incubation period as a renewal and the duration between departure and symptoms onset as a forward time. Such a method enhances the accuracy of estimation by reducing recall bias and using the readily available data.

The estimated median incubation period was 7.76 days [95% confidence interval (CI): 7.02 to 8.53], and the 90th percentile was 14.28 days (95% CI: 13.64 to 14.90). By including the possibility that a small portion of patients may contract the disease on their way out of Wuhan, the estimated probability that the incubation period is longer than 14 days was between 5 and 10%.

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

2020-08-20

OPUNTIA #477: [Re: flowers of Chez Opuntia] Unfortunately for us, a lot of the usual landscaping we’d see in our neighbourhood hasn’t been done. Just up the road from us is the Etobicoke Civic Centre, famous for its landscaping and huge selection of flowers through the beds surrounding the facilities. Because of the pandemic, those flowers are not there, and they have been missed.

[Calgary Parks Dept. planted flowers as usual. Since gardening is an outdoor activity and parks maintenance was classified as essential, the landscaping carried on.]

Also, that series of buildings may be soon abandoned for the new Etobicoke Civic Centre, which will be a few miles further east of us. We do not know what will happen to these buildings, but we suspect they will be torn down and high-priced condominium towers erected. What else do they build in Toronto these days?

[After the real estate market sorts itself over the next few years, it is anticipated that condominium towers will crash in price while single detached and rowhouses will boom. For more details, read Garth Turner's humorous daily look at real estate, www.greaterfool.ca]

[Re: series detectives] I remember seeing the Mike Shayne detective novels in the book stores, back when there were still independent book stores. But then, I also remember the hundreds of Perry Rhodan titles in the local World's Biggest Bookstore. It has been some years since I visited Sleuth of Baker Street, Toronto's sole remaining detective/mystery bookshop.

[I haven't set foot in a secondhand bookstore in decades, nor a chain bookstore in years. I buy online, usually from Amazon.ca, which provides good service and has a far wider selection than any brick-and-mortar bookstore. The books I look for are more esoteric than what physical bookstores carry, such as pastiches of the Cthulhu Mythos and Sherlockiana. Then there is the wealth of free downloads from Project Gutenberg (www.gutenberg.org) and pulp magazines of yore at www.archive.org]

My letter of comment in that issue: Indeed social media can be quite anti-social, and Zoom isn't quite the grand experience we'd all like it to be. Still, it is what we can do. I did get my hair cut, but I am sure my regular stylist (she got married near the beginning of the pandemic) will be able to fix the damage inflicted.

[Calgary philatelists are now hosting their study group sessions via Zoom, and, as you saw in this issue, our local readercon When Words Collide did likewise. I'm not against Zoom but use it with the idea that it is better than nothing.]

OPUNTIA #478: We still find Little Free Libraries here and there, and there have been some interesting books inside, but the most interesting thing we have found are the Little Free Pantries, with foods left inside for those who need it.

[By coincidence, I spotted my first Little Free Pantry two days before you wrote your letter, not in Calgary but in Okotoks south of this city where I had to make a business trip. I'm still accumulating LFL and LFP photos for a future issue.]

[Re: Alberta text alarms] The tornado warning: we've gotten them on occasion, but we did see the first ever fire tornado warning for some areas of California, issued by the US weather office.

[That's why I prefer living in Alberta. No hurricanes, earthquakes, volcanoes, mudslides, or firenadoes. We get blizzards but those don't require evacuation and people are actually safer staying at home.]

OPUNTIA #479: I see plenty of people masked up in so many places, especially malls and other public buildings, but we must also wear them in apartment buildings and condo buildings. In my building, it looks like no one got the memo. Hardly anyone wears a mask, and it seems they do not care. It is a city bylaw to wear the masks, but bylaws really are unenforceable.

[Residential buildings in Calgary are not under the orders, so at least City Council had some common sense.]

The Calgary Stampede didn't happen, and right now, we'd be well into the Canadian National Exhibition in Toronto, but it's not on, either. A whole lot of things not happening.

[That's what bothers me the most about the pandemic. Calgary was a great city for street and ethnic festivals, not to mention the Stampede. Alas, all we can do now is go for walks in the parks.]

OPUNTIA #480: [Re: postmark commemorating Pennsic Wars] I did hear that the Pennsic Wars were cancelled this year, a big SCA event, and there were many complaints.

[If the complaining cosplayers wanted authenticity, then they should be required to eat spoiled food, have an open sewer running in front of their houses, and work dawn to dusk in the fields. You know, the authentic Middle Ages, not the fake cosplayer style.]

[Re: buses] The Toronto Transit Commission now allows front-door entry, but not every driver remembers this. I take the bus so seldom these days, and I have had one irate driver tell me off about which door to enter, and I gave him as good as he gave me, and a complaint to his office beyond that.

[I'm surprised to learn that. I would have thought that all bus drivers would have been briefed.]