Science Fiction Book Club
Interview with Frank Pournelle and Jennifer Pournelle (October 2020)

Frank Pournelle is VP of Business Development for SPACELABS, performing microgravity experiments on commercial biopharma. For 18 years he's owned an Ad Agency pitching diabetes meters, online schools and found cases for lawyers. You might have heard his voice over the years asking "Were you or a loved one exposed to asbestos and did you develop a rare form of lung cancer called Mesothelioma?" He is not a writer, but did marry one.

Dr. Jennifer Pournelle is an archaeologist and anthropologist best known for reconstructing landscapes surrounding ancient cities. She is a professor at the University of South Carolina. She was an Army intelligence officer and arms control negotiator, and as a civilian she directed reconstruction work in Iraq. She wrote Outies is an authorized sequel to The Mote in God's Eye and The Gripping Hand by Larry Niven and Jerry Pournelle.

Christian Sakellariou: Solar power satellites were an idea that he tried to promote. Why was this never pursued?

Jennifer: Of course, most satellites in orbit today *are* solar powered. But in the 1980s, the sheer weight of photovoltaic cells made their launch weight so high that they were not necessarily economical. Now, thin-film and more advanced technologies make solar power the lightest weight, and therefore *cheapest* option for providing long-term power to satellite missions in near-Earth orbit. However, the high cost of boosting all of the infrastructure necessary for *space-based-solar power* (SBSP) as advocated in "A Step Farther Out" --- that is, collecting solar energy in space, and beaming it down to the earth's surface as microwaves or laser light --- still prevents that idea from being economically feasible. The "payback time" to recapture the cost of building such a solar power station would still exceed the life of the power plant. Nevertheless, we are getting close --- especially if you add in the cost savings that would accrue from large-scale switching to carbon-free power production. In May of this year, the U.S. Navy flew an X-37B spaceplane mission to field test potential components of such a system, and China has announced plans to build one. So stay tuned ….

John Grayshaw: If someone has never read one of your father's books, where should they start?

Jennifer: I'd say: first frame your tastes in general. Because there's more than one world. If you like military science fiction, absolutely positively start with John Christian Falkenburg *(Falkenburg's Legion*). You'll get hooked there and keep going. If you like exploring created worlds and universes, start with A Mote in God's Eye. It's a bit dated now – but nevertheless, it's a whomping good read. And if you like disaster fiction, well, *Lucifer's Hammer* was a best-seller for good reason.

Frank: *Starwarm*. Best. SF Juvenile. Ever. If you like centaurs or water monsters this is a classic.

John Grayshaw: Who were some of the writers your father grew up reading?

Jennifer: For books in general: a set of unabridged encyclopedias. I'm serious. And the classics. As in Latin and Greek classics. For science fiction proper, I think it's less "grew up with" and more "admired and interacted with as a young man." Heinlein, absolutely. I remember him lending me Ray Bradbury's *The Martian Chronicles* when I was a child. Poul Anderson and Frederik Pohl. Anything published in

Galaxy and *Amazing Science Fiction*. In other words, the late "Golden Age" of science fiction during the post-WWII Atomic Era.

Frank: I know he mentioned Heinlein. And I think he read some of the Hubbard pulp fiction. But mostly it was the classics forced on him at Christian Brothers College. Plutarch. Plato. The Bible. Cicero.

John Grayshaw: Who are some writers that were your father's contemporaries that he enjoyed/admired and how did they influence his work?

Jennifer: Continuing from your previous question: Heinlein, Anderson, and Pohl absolutely. Larry Niven of course. But he always admired Robert Heinlein as a true mentor: the man who advised him on the craft of writing as a profession. His knack for coupling a plotline with military action is directly attributable to Heinlein. Adam Roberts says it perfectly: Dad is very much of that generation that valued "'Hard SF', linear narratives, heroes solving problems or countering threats in a space-opera or technological-adventure idiom."

John Grayshaw: Tell is about your father's time working in the Aerospace industry?

Jennifer: He started out working for Boeing in Seattle in the 1950s. He had earned his first PhD in Industrial Psychology at U. Washington, and my mother's family had connections with Boeing (my great-uncle was an engineer, killed in a test flight of an early version of what became the B-17 Flying Fortress). In those days, the aerospace industry trained its own engineers. Dad was recruited to design and test aspects of passenger aircraft to promote "positive" passenger experience. For example, he designed the interior lighting system for the Boing 707, answering questions like "where do we position the lights and the switches. Does the passenger get to control these, or only the cabin crew? What size and wavelength should the lights be to make the customer feel calm and relaxed." After that, he followed the aerospace trail down through California – between industry mergers and promotions, he worked for most of the big ones at one time or another.

John Grayshaw: How did your father keep on the cutting edge of computers while writing the columns in Byte for so many years?

Jennifer: One word: COMDEX. Well, three words: Chaos Manor. The Byte column meant that everyone on the planet who wanted to get the word out about any new piece of hardware or software sent him one. Or two. Or several. And at that time, THE biggest trade show on Earth was COMDEX, the computing trade fair held annually in Las Vegas. His press pass meant that he could (and did) talk to absolutely anyone in the entire industry, from the design engineer all the way up to the CEO. On the "user" end of things, his huge SF base meant that he had a LOT of feedback from the sorts of people who were likely to be, and were, early adopters. And of course, he used all this stuff himself, and wrote about what he used. His rule of thumb was: only write about the good stuff. If it isn't good, or doesn't work, just move on to something more fun or interesting or useful. So, he was an "influencer."

Frank: Trial and error. Break stuff then fix it. We must have had 100 computers or peripherals at the house at any given time sent over free so that he would review them. Boxes and boxes of software. Literally three attics and a two-car storage container of computers by Next, Tandy, Apple, Osbourne and Kaypro. The publicists would come by and train him or give him extraordinary customer support. He'd talk with scientists like Dan McLean or Marvin Minsky then set out a new challenge for personal

computers. And there was COMDEX every year. Dinner with a 19-year-old William Gates. Mostly he bugged my older brother Alex to explain stuff. There was never an end to the learning curve.

John Grayshaw: Tell us about your father's work for the Reagan Administration's space initiatives?

Jennifer: Hmmm. I was right in the thick of that one. The short version: he put the president's science advisors into the same rooms (Larry Niven's house) as two competing camps in the science community, and told them if they could draft a clear message that everybody could agree on, he could get it out to, and endorsed by, tens of thousands of SF, computing, and science buff fans. They did, and he did. At the time, his own objective was to get more funding expended to secure new technology and a permanent presence in space.

John Grayshaw: What kind of research did your father do for his books?

Jennifer: He read. A LOT. Voraciously. Especially military history. When he was working in elements of military historical fiction (like for the Janissaries series), he'd do site visits. I remember once walking him along the Limes – the Roman line of defenses against Germania. He was quite moved by the Plain of Thermopylae. He also interviewed a LOT of people about the aerospace science. He visited JPL pretty often.

John Grayshaw: Was your father's writing a significant part of your family life? What I mean is was it talked about, part of dinner table conversation, and so on, or was it regarded as just your father's job?

Jennifer: It was all-consuming. Inescapable, with or without him. Even now, I'm accosted in elevators by people who see my name tag and ask whether I'm related. It's always interesting to discover which of the three worlds – space science, SF, or computing–they know him from.

John Grayshaw: Did your father tell you stories? What were they about? Did he read books with you? Which were his favorites?

Jennifer: He had a rather creative approach to family history, which I've since discovered were stories no doubt made up by his father. They turned rather mundane farmers and craftsmen into tall tales of derring-do. He handed books to me, with absolutely no regard to whether they were age-appropriate. *The Hobbit*, which I quite enjoyed ten years later. *The Martian Chronicles*, which I adored. But we never discussed them. It's hard to know his favorites – every wall of nearly every room in the house was covered with them, and so far as I know, he'd read them all.

John Grayshaw: What are some of your fondest memories of your father and what are some of the funniest memories?

Jennifer: My funniest memory is when I was about nine years old. Dad, Alex, and I were playing cops and robbers in the back yard. Dad was using the classic thumb-and-forefinger as a make-believe pistol. In a fit of innovation, I flipped a bamboo table on its side, and ran forward, "firing" from behind. He "aimed" quite seriously, sighting down his finger, shouting "Bang! Bang! Bang! Bang! You're dead!" I answered, "I have a shield! YOU'RE dead!" He stopped, raised his finger-gun to the "safe" position, assumed his professorial stance, and said "Young lady, I should bring you to the range, and show you just what this Lugar would do to that rattan! YOU ARE DEAD!" In that moment, I looked at my make-believe pistol, and then at his make-believe pistol, and then at my make-believe shield, and burst out

laughing. I'm not sure that he ever understood what was so funny about that. He took his fiction VERY seriously.

Frank: He'd go on these crazy adventures with friends like Barry (Sarge) Workman, driving a Jeep pickup to the tip of Baja to teach college in Cabo San Lucas. Stories of the 'dreaded Mexican bus' and unending dust holes would entertain us for hours on a family road trip. He'd go sail with Poul Anderson nearly dying, fly to South Africa to meet Nelson Mandela or hunt jade in Guatemala with my godfather, Russel Sikes.

The stories would grow over time into a legend and often become a narrative detail in the books. So when we found out Jerry had flipped his Bronco in the middle of Death Valley, got disoriented and walked further into the desert with pants on his head to keep warm, we'd smile and ask how such a smart man would do such a dumb thing? And we'd laugh in understanding. We'd invent shorthand among us. The Jerry Pournelle Action Figure would now come with both epaulettes and NOW WITH LAPTOP SLAPPING ACTION! If retold with a sense of humor and irony, he'd let you tease him. In the Boy Scouts my friends had a tradition of fireside plays we called THE ADVENTURES OF SARGE AND DR. PERNEL. He'd cackle at his own expense and that was my favorite connection: the narrative of the legend that we all knew wasn't quite true.

John Grayshaw: When did you first read your father's writing?

Jennifer: In the mid-1970s, as an undergraduate at Michigan State University.

Frank: He never pushed his own stuff on us but both Jerry and Roberta always encouraged us to read something.

I have a picture reading *Birth of Fire* at a Boy Scout Camp age 12, around 1978. Prior to that I know I picked up a copy of *Escape from the Planet of the Apes* maybe the year earlier. Neither really lit a fire under me. Mostly I knew of his writing from other younger science fiction fans first. I'd be at a friend's house and maybe their dad would have a copy of OMNI Magazine or ANALOG and they'd always ask "Are you related to Jerry Pournelle?" I think I read *Oath of Fealty* first because it made it to the NY Times Best Seller list. I tried to read Inferno and *Mote in God's Eye*, but it wasn't until after college that I could comprehend the works.

John Grayshaw: Did you go with your father to science fiction conventions? Any memories of these? If not, did he tell you any interesting anecdotes about conventions and/or meeting his fans?

Jennifer: No. My brothers have many stories about this; as the oldest, I was away in college at that time.

Frank: Early on in the 70's, it was just the four brothers and generally it was a package deal. If you wanted Jerry at your convention, you got a pack of Pournelle boys, sometimes with Roberta as chaperone. And at the time, there was kind of crossover between the Society for Creative Anachronism and early SF conventions. The Flying Karamotsov Brothers would play both venues and often the vendor booths would be the same folks. There certainly was no COMICON back then.

One of my first memories was at a costume contest at WorldCon in Vancouver 1974. Maybe I was 6 or 7? I recall a very heated argument between Jerry and Harlan Ellison. I thought they were going to fight right on the stage before 1000 fans. Turns out that's how they got along.

We were often turned lose at conventions and the only caveat was we had to take care of each other until dinner. Because of Jerry's involvement with SFWA and sometimes being up for awards we got free reign of the VIP Suite. Phil would play D&D. Alex would take us to see movies like 5,000 Fingers of Dr. Monroe and Atomic Brain. Rich was a later tag-along, but we always made sure he was first in line at the Ice Cream Social. Both at conventions and at LASFAS clubhouse we were always volunteers and free labor. We'd sneak in the backroom of panels to watch Jerry or Mr. Niven or Robert Heinlein, then disappear after 8 or 9, as the liquor would become embarrassment.

I know I was communally raised by SF writers and editors and publishers at these conventions. Greg Bear, Greg Benford or even Poul Anderson and his wife Kiren would catch us dropping coke cans off the roof of a Marriot or passed out from sugar in a hotel lobby. They wouldn't tell on us, but they'd protect us and made sure we got medical attention. And it wasn't just at conventions. Marilyn Niven would hang out with Roberta so that we could swim for hours past curfew. John Carr stepped in on numerous occasions when brotherly competition turned to bullying. Honestly, the warmth and support we get from the SF community is just like an extended family.

We always were taught to treat readers and fans with huge respect. Roberta often said these were the folks that were going to pay for college. And they did. At random basement business centers or on the way out of a hospital, or in line for the Hollywood Bowl; we often met brainy, socially awkward folks that knew Mom or Dad from conventions and LASFAS or Byte Magazine. You know SF readers. Until 3 months ago when Roberta passed away, I'd always thank the fans and pass on the messages to her. She remembered something about everyone.

Andrei Utkin: I have always been fascinated by the idea of collaborative writing (on of my favorite sci-fi authors being the Strugatsky brothers, who wrote all of their major works together). How did the process work between Jerry and Larry? Was there some clear delineation of work (e.g., ideation vs. writing), or was it all fluid and ad-hoc?/ John Grayshaw: Tell us about his friendship with Larry Niven? And when they wrote together how did the process work and who wrote what?

Jennifer: I'll bounce this one to Frank. He saw way more of that process than I did. But Dad and Larry talked about this a lot at cons and book signings. The simple version is that Dad was really, really good at plot lines. Larry was really, really good at characterization and world-creation. But by the time they got done writing and exchanging and re-writing and brainstorming and … well, it was hard to tell or remember who actually wrote which bits. So, fluid and ad hoc, fueled with vast amounts of coffee.

At Dad's funeral, Larry told me that Dad was the best friend he'd ever had. I think that pretty well sums it up. They were a band of (two) brothers.

Frank: This is often asked and has been covered so frequently I'd like to say something new. We were family first and foremost.

My contention is that they were really good friends and spent a lot of time together to create a seamless final product. They were smart as hell, too. It's wasn't just the invention of computers and modems that made their collaborative work unique. They loved drinking just a little too much coffee and seeking the twinkle in each other's eye.

Let's start with the fact that Jerry was smart enough to keep Larry entertained and challenged. They had this sympatico background of opposites. Dad grew up poor and in the South with numerous degrees, Larry in Beverly Hills, who flunked out. Larry has a steal trap for details, Jerry for concepts and patterns and history. Larry pondered aliens, Jerry the societal and political impacts. They'd muse together, try to make the other laugh or astonished. Egg the other on to greater impossibility. Cackle at the ridiculous. Smooth out weaknesses.

When it came time to write they both knew the story line, the plot beats and often several of the characters because they had already hashed it out on a hike or a swim, over a meal or rang the other up on the phone at odd hours.

Jerry was always a forceful verbal storyteller. Understanding that Jerry's dad, Doc Pournelle was in radio and that from an early age Jerry fired his own imagination in the "theatre of the mind'. It might be fair to say he wrote what he heard in his head.

That's why Larry and Steve Barnes or other collaborators would pick up the oral thread –then I think try to explain the ideas in Jerry's tale. Jerry would go back and add small details. The model of the gun. The brand of the 4X4. The location of the ranch. The type of liquor. He was also pretty good at pacing and scene transitions and final editing.

I'd be remiss not to mention that Larry Niven went on almost every hike and every canoe trip that Jerry conducted for Boy Scout Troop 139. After 50 years of adventures with the Pournelle's, Larry is actually capable of distinguishing myself from the other brothers! Having him around is like getting a few more years with Jerry. Plus, he remembers ALL the stories and their genesis. They told stories together like a well synched Vaudeville act. And they played on and on until they couldn't anymore.

John Grayshaw: Jennifer please tell us all about writing Outies. How did the project start? How did the writing process go? And what sort of involvement your father and Larry Niven had?

Jennifer: Oh, the start was hilarious. The short version is: at Dad's 75th birthday bash, I bet I could write one, and my oldest brother, Alex, bet that I couldn't. If that sounds like sibling rivalry, I couldn't possibly comment. A couple of years later, I was between jobs, so while I was job-hunting, I sat myself down and just started. *Mote* had always been my favorite, so first thing: I re-read everything in the Second Empire of Man universe, in order: *King David's Spaceship*, the *Mote in God's Eye*, the *Gripping Hand*. Several things struck me, and I quite explicitly decided to take them on. Firstly, in the early 1970s, *Mote,* like Ursula Le Guin's *Left Hand of Darkness*, was pretty edgy in taking on non-binary gender and sex. But now, in the Century of the Fruit Bat, they are both, well, more than a little dated. It was time for a refresh. Secondly, while I'd always been a huge fan of the "cadet corps" angle – you know: Star Trek; Star Wars; Red Shirts– all that military space opera stuff –having been through a military career myself and out through the other side, while I accepted that those characters were on the one hand extremely expert within their own spheres, I now recognized in maturity that they were (unwitting) oblivitrons outside those areas of expertise. I viewed their reporting as "accurate" from their own point of view, but

in reality highly uninformed. Thirdly: Dad had introduced Bury as an extremely sympathetic Levantine character, but this was before U.S. involvement in the Middle East had become so intensely fraught. The 20th Century American attempt to assume from France and Britain the imperial mandate over Persia, the Levant, and Mesopotamia consumed the latter part of my military and the first part of my civilian career – and gave me a strong perspective on what that looked like from the inside out, rather than the outside in. That led me to wonder: What did the Second Empire of Man look like, not from the view of the Imperials, but from the view of the imperialized? Fourthly, I actually think that a great strength of "hard" SF is getting the science right. But science isn't just rocket science: it's geology, and biology, and ethology, and anthropology, and a whole lot of other things that I contend with every day. Dad had done the rocket science: I saw no need to repeat that. So I dug into the other sciences. How in heaven could we account for Motie reproductive biology? How would we know where they "originally" came from? What would society look like on an "outworld" far from imperial centers? Planets are big – how much variation would we even know about on one that was far, far away from centers of study? And finally: 40 years have passed since the Mote was published. Where would those original characters be now? Now, Dad always insisted that he "didn't read fragments." So, I took very, very careful notes, to remain faithful in every detail to the Mote universe. But I did not send the manuscript until it was – done. In brief, he loved it. Then pitched it to Larry. We met at a coffee shop in San Diego adjacent to a book signing they both attended. And they both agreed to endorse it.

John Grayshaw: Frank please tell us of your involvement with your father's estate and what new projects are coming up?

Frank: We are working with Castalia House in Europe to bring out *That Buck Rogers Stuff*. It's a brighter look at the hopes and dreams that Jerry advocated. The group of essays are influenced by artist Ron Villani and his humanoid robots rooting for humans to reach the stars. *That Buck Rogers Stuff also* contains some really aspirational goals for science fiction set forth from an old SFWA article Jerry penned titled *The Bards of Science*.

Once we close the Estate, it will be placed in a trust and the family can resume re-issues and open the trunk.

John Grayshaw: Are any of your father's works under option for movies or TV?/Mike Garber: Is there any scuttlebutt about the "Janissaries" movie project? Haven't heard much but I would love to see it done.

Frank: We've had a renewed interest for these classic SF properties to be placed on long form streaming on platforms such as NETFLIX, APPLE, DISNEY+ and AMAZON. And it doesn't hurt that AUDIBLE is enjoying pretty strong sales in the Estate titles as podcast and download material.

As to movie and streaming, the success of RINGWORLD being rediscovered by Amazon, there's a renewed interest in the other collaborative works of Niven and Pournelle.

The Mote in Gods Eye is under consideration along with the entire CoDominum Universe. This incorporates Jenny's *Outies*, Jerry's *Spaceship for a King* and *Gripping Hand* among others.

For solo works, James Cameron recently renewed his option for *Birth of Fire*. We'll likely see some elements of Jerry in the follow-on *Avatar* series if they bring back Colonel Miles Quaritch.

Janissaries has been optioned for years and there are pitch meetings under way. There were two meetings by sharp directors along with writer David Gerrold for *Starwarm*, but water monsters are still kind of expensive to render, it turns out.

For what's trending in streaming content today, we'd love to see the grendels from *Legacy of Heorot* or the *Starwarm* enter the pantheon of the Lovecraft fiction and monsters. And with the release of *Dune* next year, we think there will be a rediscovery of '80s sci fi franchises that are "parallel". Perhaps the fithp of *Footfall* or the Motie universe might be rediscovered?

John Grayshaw: Are there any unpublished works by your father in drawers or archives somewhere or is everything published?

Jennifer: Yes, I think so. Out brother Phil is working with those. He's managing the literary estate.

Frank: There are 9 re-releases planned for 2021. As soon as the copyrights transfer to the new trust, we'll be releasing a revised title and cover nearly every month as CHAOS MANOR™ PRESS.

Phil Pournelle finished *Mamelukes* with David Weber in the fourth series of *Janissarie*s. Looks like there might be a fifth and sixth installment by Baen. John Carr has the rights to new anthologies in the THERE WILL BE WAR series and is currently finishing *Kenyons to the Keep*. My oldest brother Alex found a few unsold short novels and a couple outlines including *Subway to Sunrise* with an early John Christian Falkenberg. Plus he found a groovy 60's techno-thriller which would be the third in the series of *Red Heroin* dad wrote post Vietnam. My goal is to package that as a triptych entitled 3 LETTER AGENCY. It's kind of John D McDonald tribute.

Jerry was also very kind with his time to aspiring writers so there are storylines inspired by Jerry Pournelle floating out there. My brother Phil and David Weber are a good example with the *Janissaries* series. Then there's John Carr. But, there's a ton of unauthorized works in the wings that might take flight. .

And lastly, there's a reformation for all the works interpreted toward the regions of India. With 125 million young English readers entering the middle class, we think the works of Jerry and Mr. Niven will transport a whole new set of readers to other worlds from the sub Asian continent.

John Grayshaw: Did your father have any particular writing habits or routines he stuck with?

Jennifer: Like me, he was a night owl and deadline-driven He'd go for long walks with the dog in the morning, fart about with computers mid-day, answer a LOT of email and work on his column in the afternoon, and then read and/or write far into the night.

Frank: He filled notebooks in cursive early on. Then it was night long sessions before the IBM Selectwriter. Later he would write then rewrite on the computer. That was tough for him after brain surgery and a later stroke. He was constantly retraining. Later he moved to what he called a monk cell for a disciplined session of 2-4 hours. He wouldn't allow distractions but yoga and stretching. His work on *Escape from Hell* with Larry Niven had post-it notes all over the place with bookmarks on Sylvia Plath.

John Grayshaw: What were some of your father's hobbies other than writing?

Jennifer: Off-roading. Scouting. When he was younger, sailing. High Church (Episcopal and Anglo-Catholic). A bit of Cosplay (Regency; Soc of Creative Anachronism in his younger years). But "writing"

encompassed so much – space; computers; SF; public speaking on all three, that there was precious little time left for much else.

Frank: Jerry loved movies, hiking with the dog, sailing and fencing when younger, and always drove just a little fast on Mulholland Drive and Laurel Canyon. He read with vociferance, played sudoku to keep his mind sharp and cared deeply about the future of American democracy. He loved to eat. He read a ton of magazines and subscribed to three daily papers. He read them to Roberta almost every morning.

John Grayshaw: What is your father's legacy? Why was his work significant at the time? And why is it still important today?

Jennifer: Dad definitely saw (and wrote) SF as both a bellwether and harbinger of technological innovation and its relationship to political power and social configuration. He also made military SF, well, believable and fun. That he has at least three separate (if overlapping) fan bases speaks to his ability to make science exciting, understandable, and believable to a lot of people.

Frank: Jerry left behind 5 kids and 4 grandkids with a strong sense of purpose and logical articulation. That's an extension of both his written works and his life. Never give up. Keep trying. Leave behind a better place.

I think his most important work was conducted from 1973 to around 1985 both on his own and in collaboration.

From *Inferno* to *Mote in God's Eye* to *Lucifer's Hammer* to *Footfall* I think he was able to synthesize the zeitgeist for a portion of the college-educated and slightly right leaning of the time. He gave voice and hope to the threat of nuclear obliteration and over-population. He helped folks understand a path through the dark times of economic depression, changes in the industrialized military and aerospace complexes and even provided an entertaining roadmap for conflict with the Soviet Union, Middle East and Southeast Asia. That was the political scientist in him.

I see huge impact coming from the engineering side of him through present-day NASA and commercial space programs. With pretty crude math and a carnival barker southern twang I think he ensorcelled kids like Elon Muck, Jeff Bezos and even Paul Allen into believing crazy Science Fiction tales could come true. Or at least this vision of a future was worth risking it all.

He also made Science Fiction cool in the way that Hemmingway, Heinlein and Tom Clancy required a commitment to a cause were it to be worthwhile. Back before Comicon in the 70's and 80's, science fiction was decidedly not cool. I mean *1984* by George Orwell and *Fahrenheit 451* by Ray Bradbury were considered science fiction. We've gone WAY OUT comparatively in that definition.

Certainly, it was rare to see science fiction on the NY Times Bestseller List outside Frank Herbert's *Dune*. But as military and college kids opened their eyes to short science articles by Niven and Pournelle in OMNI, GALAXY, ASIMOV'S SCIENCE FICTION, and ANALOG they found their way to larger speculative properties and complete sci-fi universes. In some ways Pournelle and Niven may have opened up popular SF for the new types of non-linear, hard science fiction of Orson Scott Card or the Hitchhiker's Guide by Douglas Adams. There's no direct line of succession because both Niven and Jerry Pournelle picked up what was popular at LASFS (Los Angeles Science Fiction Fantasy Society), in coffeeshops,

grilling the kids on backpacking trips, catching every episode of Big Bang Theory or just reading a great deal. But they could tell what made a good story with some level of allegory to the time.

I'm having a great time putting Pournelle and Niven's works in a solo historical context. It's more like a pantheon or a progression, right?

I'd say without traipsing through the circles of hell (*Inferno*), imagining cute-but-deadly aliens watchmakers (*Mote*) reading about Kittycats with machine guns (*The Houses of the Kzinti*) or imagining elephants in Kansas with machine guns (fithp in *Footfall*) that there would be no non-linear science fiction streaming today. By laying the groundwork for full immersive science fiction, Pournelle (and Niven) made it ok to re-release *Dune*. I think they helped break the leashes that allow a 2020 reinterpretation of H.P. Lovecraft's dark New England monsters for *Lovecraft Country* (in an all-black cast no less) or even lasted long enough past death for the possibility of *Ringworld* on Amazon Prime (Niven is very much still alive)

They not only developed the audience, but they created the very subject matter that became nostalgia. And they were part of whole cabal of entertainers that pushed the envelope out of Vietnam, through the Cold War and into tech transformation on a scale never experienced in history.

Imagine, in 1970 they had the balls to forcefully predict what 2020 might look and feel like. To demand advancements in science and technology and society and healthcare within their lifetime. Most even lived to see it come true pushing past addictions, strokes and brain cancer. That's a legacy. It's a runway for reaching the stars.