

OPUNTIA

71.3

ISSN 1183-2703

February 2012

OPUNTIA is published by Dale Speirs, Box 6830, Calgary, Alberta, Canada, T2P 2E7. It is available for \$3 cash for a one-time sample copy, trade for your zine, or letter of comment. Americans: please don't send cheques for small amounts to Canada as the bank fee to cash them is usually more than the amount. US\$ banknotes are acceptable in Canada at par value; what we gain on the exchange rate we lose on the higher postage rate to USA. Do not send mint USA stamps as they are not valid for postage outside USA and I don't collect them.

Whole-numbered OPUNTIAs are sercon, x.1 issues are reviewzines, x.2 issues are indexes, x.3 issues are apazines, and x.5 issues are perzines. A cumulative subject index for all issues is available on request.

WHAT IS FAPA?

This issue is for the Fantasy Amateur Press Association. (Details from Robert Lichtman, 11037 Broadway Terrace, Oakland, California 994611-1948) For those of you receiving this issue who do not know what an apa is, please read on.

Modern zine publishing as we know it today began in the middle 1800s as cheap, home-use printing presses became available to the general public. Zinesters developed a distro method called the amateur press association (apa) where members sent x number of copies of their zine to a central mailer (also known as the official editor). The zines are collated into bundles, and each member gets back one bundle of everyone's zines. There is an annual fee to cover postage. Apas have a minimum level of activity required, such as publishing 8 pages a year. It must be emphasized that apas are not for passive subscribers; you must commit to the minimum activity level or you will be booted out. FAPA has been going for more than 70 years; the oldest apa is the National A.P.A., founded 1876.

x.3 OPUNTIAs are for FAPA. In addition to articles, there will be mailing comments on other apazines in the last FAPA bundle. I usually quote the remark I am commenting on, so hopefully an outsider can still read the comments with interest.

FAPA CLEARCUT AWARD (for most pages published in a mailing) goes to A. Langley Searles (post-mortem) for 164 pages in FAPA #295, and Robert Sabella for 50 pages in #296 and for 44 pages in #297 (also post mortem, alas).

MAILING COMMENTS ON FAPA #295

FAPA #295 received in Calgary on 2011-06-01.

Fantasy Amateur Re: FAPA Egoboo Poll results. Why was I tied for sixth place with Brad Foster as Best Artist in FAPA? I didn't do any art in OPUNTIA. Or is FAPA like last year's Hugo Awards, where a professional writer won for Best Fan Writer and a podcast won Best Fanzine? This is also an insult to Foster, since he is a good fan artist and he shouldn't be ranked down with me.

A Different Drummer You quote William Blake's line "*If the doors of perception were cleansed, everything would appear as it is, infinite.*" It reminds me of Goethe's line "*If everyone were to sweep their own doorstep, then the world would be clean.*" Sometimes the use of a line can be too obscure, since it is impossible to know everything in the arts. I could never figure out why an Australian zine calls itself ETHEL THE AARDVARK until I came across the Monty Python skit where John Cleese is a put-upon bookstore owner whose customer keeps asking for ridiculous titles until he finally asks for ETHEL THE AARDVARK

GOES QUANTITY SURVEYING, which, by a miracle (and a convenient way of ending the skit), is the one title that Cleese does have.

Alphabet Soup "*In the last couple of decades, [SF] magazines haven't been acquiring any new readers at all.*" This decline began before the World Wide Web and isn't confined to SF; all fiction magazines are declining. Television makes it so much easier since it is a passive medium that allows viewers to sit back and let someone else do all the visualization. E-zines were predicted to be the next big thing at the dawn of the WWW, but they too aren't succeeding, since the mass of people would rather watch a video on YouTube. Twitter is for people who don't want to scroll down through a blog because it takes too long.

Visions Of Paradise #162 Re: the sudden throat tickling and coughing you and your family had which turned out to be a leaky can of Mace. You had called the gas company because it might have been a natural gas leak. If it had been, you should have smelled rotten eggs. Natural gas is methane, which is colourless and odourless, so dimethyl mercaptan is added to it to produce the odour so that people, especially the pipeline companies, can detect a leak. I don't know what Mace smells like but probably not the rotten eggs scent.

Visions Of Paradise #163 *"It seems as if the planet is going crazy in recent years. ... Is global warming possibly responsible for all of this?"* No. The palaeoclimatological record indicates that for the past couple of centuries we have been living in an unusually stable climatic period, and are now shifting back to the normal volatile climate, exacerbated by humans. More importantly, humans are spreading everywhere and have a bad habit of living on floodplains, along shorelines in tectonic zones subject to tsunamis, and in river deltas two metres below sea level in hurricane zones. It isn't that the frequency of adverse events is much higher, it is that more humans are now in the target zones. Japan and California built nuclear power plants on earthquake faults, New Orleans is being rebuilt so that it can be destroyed again by the next hurricane, and farmers in the Red River valley of Manitoba act surprised when they are flooded every second year.

Fantasy Commentator This special issue about John Campbell, a giant among SF editors, is a fitting tribute to Langley Searles, who didn't live to see it in print. It will become a standard reference for the history of SF prozines. One minor nitpick: it could have been better proofread. There were noticeable typos about every second page, many of them quite jarring.

Aft Gang Agley Re: your house hunting. Don't rush to buy a house; they still have a long way to fall in price according to the

Case-Shiller index. More importantly, a mortgage ties you down and crimps your lifestyle. I bought my house in 1982 and lived in the basement suite. I not only got the rent from upstairs but also could deduct half my mortgage and utilities. My tax refund was bigger than the rental income. As my situation improved, I moved upstairs and rented the basement. The mortgage was paid off in 15 years; most Canadians take 25 to 30 years to get out of debt. Canada's housing boom is just now starting to collapse, and a lot of young and stupid couples will suffer.

You make an interesting point that libertarian SF presumes unlimited cheap energy as an axiom, in which case any ideology can prosper. I always wondered why every libertarian I've ever met is a single male who usually works in a comic book shop or a warehouse loading dock and lives in a basement suite. I'm heavily invested in petroleum but while the awl biz does have a few loose screws rattling around in the box, almost all of my fellow investors are sedate family men whose idea of revolution is to wear a bright yellow tie with a blue shirt.

I Also Would Like To Comment: Nothing to do with any of the zines in this bundle, but I notice that bundle #300 will be here sooner than you think. Will anyone among the Old Guard be preparing some sort of commemorative issue on the history of FAPA? Or perhaps reprint a few sample articles from the 1937 bundle #1?

MAILING COMMENTS ON FAPA #296

FAPA #296 received in Calgary on 2011-08-24.

A Different Drummer #26 “*And SF writers also neglected the socio-economic impact computers would have on society.*” This may have more to do with cyberpunks stories being more exciting and easier to sell than a story about an accountant who sets up a spreadsheet on his laptop and does in fifteen minutes what it used to take a team of clerks days to do back when. In the first decade of the 1900s, when the automobile was the new and exciting thing, there were lots of stories about the hero using his amazing horseless carriage to rescue a fair maiden in distress. Writing about a delivery man using a truck instead of a horse and wagon wouldn't interest any editors, and stories about someone sitting in a traffic jam do not keep the reader at the edge of his seat. Westerns are about lone gunmen riding into town and clearing out the bad guys, not cowboys fence-riding or checking the herd to make sure some silly cow didn't get herself stuck in a mudhole.

Visions Of Paradise #164 Re: mashups of zombies or vampires with classical novels such as Jane Austen, or boiler-plate novels such as Abraham Lincoln or Queen Victoria as vampire hunters. It'll blow over, just like other fads such as the SF New Wave or cyberpunk. All genres of fiction are riddled with stereotypes or cliches. As an example, it is difficult to find a decent alternative

history where the hero doesn't meet up with every famous person of that era. Just once I'd like to read a time travel story where the heroes land at Pearl Harbour in 1066, or Krakatau in 1492. -4-

Snickersee #Gak Re: tsunami warning signs you saw in California telling people to run uphill if the alarm sounds “*and there was an arrow indicating the correct direction for those Californians who have difficulty distinguishing uphill from downhill.*” I'd laugh, but in the mountain parks adjacent to Calgary there are signs warning people that they are standing on the edge of a cliff. Every year a few people die when they walk around the sign and fall to their death.

Re: August Derleth threatening your publisher because you did a Cthulu Mythos story for which Derleth claimed he had the copyrights. It is a moot point of course, because all of H.P. Lovecraft's copyrights expired a few years ago and anyone can now reprint his stories or use the Cthulhu Mythos in pastiches. But grant the devil his due; Lovecraft would probably be forgotten by now had it not been for Derleth keeping him in print.

For FAPA Re: your trip to remote areas in Australia. “*I just hope some of the places we are staying have suitable generators for charging our batteries.*” When I go out into the mountains or the flatlands, I shut off my cellphone and leave my laptop at

home. Other than a death in the family, I can't think what would be so important that you have to stay connected. I check my cellphone once a day for voice mail, and that's all that is needed. No one has to blog from a mountain top because nothing has ever been blogged anywhere in the world that couldn't have waited. The world will get along without tweets such as "I'm walking along the edge of the cliff. Just saw a man fall off, LOL." The only electronic gadget I carry is my digital camera, but I do not feel the urge to upload the photos the instance I take them.

"The physical lending library is going to be displaced by e-books (economics will demand it) ... " Precisely for that reason there is a debate in Calgary as to why we are spending \$100 million for a new public library. The Calgary Public Library already offers its members an e-book service called NoveList. I have seen the future and it is a pdf.

Alphabet Soup #71 *"You can find absolutely anything on the Internet."* Speaking as someone who is doing a lot of historical research on the Internet and top-end subscription databases at the University of Calgary, I disagree. There are lots of people and places I am researching who have nothing about them on-line. Or, worse yet, have a common name that brings up 20,000,000 hits on Google. Or even an uncommon name; Dale Speirs on Facebook is a Texan, not an Albertan. (Although he's probably wondering about me ever since I published THE HISTORY OF MAIL BOMBS.)

"When my parents died I don't think any member of my family thought anything about newspaper obituaries." In our family we always took great care over them on the grounds that they become part of the public record and preserve a part of their existence. In particular we think of distant descendants who are trying to re-connect to the family tree. We always put in things about hobbies and careers that can't be found on death certificates or census forms. In my historical research I rely on them if I know the date of death and can thus find them (few newspapers are indexed).

Re: scanning apas. I've scanned all the back issues of OPUNTIA because I recognize that the next generation isn't going to bother with paper. Currently I'm scanning back issues of Calgary aquarium and philatelic periodicals. When my Uncle Norman died, I found in his effects (I was executor) a copy of a community zine from Gunnar Mines in northern Saskatchewan circa 1950s. It is probably the only copy left in the world so I scanned that as well, in case some future generation might be interested in the social life of a uranium mine.

Visions Of Paradise #166 Re: the New Jersey legislature eliminating cost-of-living-allowance from your pension just after you retired. At the moment, my pension plan has a 60% COLA but because I was doing research a decade before I retired in 2010, I (and many others) could see this coming. I therefore began investing in petroleum, bullion, and income

funds long ago because I knew I had to be prepared for both double-digit inflation (which is soon coming) and pension changes triggered by the flood of Boomers retiring. Many Boomers say they'll sell their house and downsize, not understanding that the housing market in both Canada and the USA will not recover for decades because the next generation won't be buying those houses except at a discount.

The worst mistake that people make, and I did it too until after the Millennium, is to put their savings in low-interest term deposits that don't keep up with inflation. I used to preach about this but no one would listen. When I was a university student in the middle 1970s, I knew many people who had retired in the 1960s and early 1970s on \$200/month pension. At the time it was good money, and if your house was paid off, you could live a comfortable existence. Then Nixon took the USA off the gold standard on 1971-08-15, forcing all the other countries to do the same. Since governments could then (and still do now) print an unlimited amount of paper currency without having to back it with gold, inflation started up. Slowly at first, then double-digits by the end of the decade, and finally peaking at 22% in 1982 before the world economy had a heart attack and fell dead to the ground. I later met a few of the \$200/month pensioners who had the misfortune to live too long; they were now in cheap rooming houses and eating at the Salvation Army. That is why I spent a decade before I retired building up investments that do well

during inflation, such as oil and gold, while others buy "safe" term deposits and bonds that yield next to nothing. My assets have been increasing in value or holding their own as stock funds collapse and term deposits decay. If my pension fund decides to cut out the COLAs, I will be annoyed but it won't threaten me. I could live twenty years solely on my investments if I had to, but the worst case scenario is that my pension would be frozen, in which case I could get by for forty years. At age 63 I'll get a top-up from the Canada Pension Plan. A lot of Canadians think they're going to live only on the CPP and supplemental pensions, but don't realize that even now the total of the plans will just barely pay for a room in a boarding house.

The end result is that we'll be seeing more and more grey-haired hamburger flippers and Walmart greeters trying to supplement their pension. Forget about the annual Caribbean cruise, or keeping up the golf club membership. Or, in the case of SF fans, no more trips to overseas Worldcons.

But I don't preach anymore.

Voice Of The Habu V13#3 Re: William and Kate's wedding. Afterwards they did a Royal Tour of Canada, including the Calgary Stampede. I saw them on the parade route, which they drove just before it started, but the convoy whizzed by so quickly I barely caught a glimpse of William (Kate was on the other side

of the limousine.) I held the shutter down on my camera as the motorcade went by and managed to get one photo of them, which, with judicious cropping and editing, gave me a murky enlargement of them.



What surprised me was the excited buzz of the crowd for ten minutes after they went by. It was an open secret that Buckingham Palace sent them to Canada to help revitalize the public's interest in the monarchy, and they succeeded beyond H.M.'s wildest dreams.

The Monarchist League of Canada, whose main activity is writing letters to the few newspapers still publishing, were positively rubbing their hands together in glee. Canada Post, which never



bothered about Chuck and Di, issued two engagement stamps of William and Kate, and one of the wedding, plus special limited-edition postmarks all over the country. I don't think it's because they're monarchists, but because the flogging of such philatelic impedimenta made a nice contribution to their profits. Fortunately the wedding was just before the postal strike and the Royal Tour was just after the strike ended. And the weather was nice for the parade as well, which the young couple watched after they'd zoomed down the route.

Nice Distinctions #21 Re: the birthers. I don't see what the fuss was all about. After all, President Chester Arthur was a Canadian, born in Québec. But imagine going back to the year 1950 in a time machine and using words like birther, or telling someone that you have windows on your desktop.

MAILING COMMENTS ON FAPA #297

FAPA #297 received in Calgary on 2011-12-29.

In Memoriam I was shocked to learn of the sudden and unexpected death of our Official Editor Bob Sabella on 2011-12-03 from a fast-growing brain cancer. It seemed to me a particularly cruel death because of his recent retirement, which he only got to enjoy briefly. I retired about the same time he did, so it struck home. If I ever had any doubts about taking early retirement at 55 instead of working until 65, those doubts have now vanished. I could have stayed longer and built up a higher pension, but instead will be able to enjoy my own schedule and do the things I want to do, not because I have to do them.

A Different Drummer #27 Re: your summary of steampunk. The Robert Downey movie version of Sherlock Holmes seems to be drifting into the steampunk camp. It could be worse; I'm surprised no one has turned THE HOUND OF THE BASKERVILLES

into a zombie mash-up or recast it with teenage vampires -8- in love. Perhaps they have and I missed it. I've noticed that steampunk has divided into two; the literary ones, and those who got into it from comics or movies. The latter are also costuming fans, especially the fat ones, because they can look reasonably good with enough black taffeta and a cape.

Alphabet Soup #72 *"Cyberpunk is fantasy. You can tell because nobody ever has to do documentation."* It reminds me of the old computer programmer joke that the best job security is to code software with spaghetti logic, no documentation, and error codes that don't tell you anything useful. Oh wait, that's Microsoft's product specifications.

Re: your local commuter rail lines never going where you want to go so you never use them. Calgary's LRT system is fully integrated with the buses, and all the lines cross over in the downtown core. I use the LRT fairly often when traveling between the University of Calgary campus and downtown. The cars are spotless with no graffiti and the system is fast.

For FAPA *"Books are heavy and have very little value second hand."* I have two rooms of books plus the bookcases lining my living room. I have slowly begun to start thinning them out and dumping them off at the Co-op Book Exchange or other giveaway outlets. When I was building up my collection from the 1970s to

the early 2000s, I had the expectation that I would be able to sell them to a dealer, not necessarily at a profit but at least enough to recoup a reasonable portion of their cost. Now I expect that it will be a race between my thinning them out to people who will read them and my death, when my heirs will dump them all into the recycle bin.

Re: the Australian housing crash. Canada's housing market is just starting to top out as the Boomers retire and downsize or have to sell because they didn't have any savings or pension. Established suburban housing is staying on the market longer and longer. Condo developers in Toronto and Vancouver are only selling to young and stupid couples, or small-time speculators who find they can't flip the units or rent them at a decent return. Mortgages in Canada are recourse loans, so people can't just walk away from them. Garth Turner, who used to be a Tory M.P. before Prime Minister Steven Harper expelled him from the party for telling the truth too often, has an hilarious blog about Canadian real estate at www.greaterfool.ca

Voice Of The Habu You mention the leadership course you are taking. I supervised people for 31 years with the Calgary Parks Dept., probably about 2,000 seasonal workers and a couple hundred permanent staff. I took some leadership courses, but found that while they were helpful, they often did not match the real world. For example, there are some interpersonal conflicts

between staff that could not be resolved by sitting down and chatting, and separating them was not possible. I found generational and cultural differences required different techniques. The one thing I learned that worked the best was to explain to workers why they were assigned a task and why it was important. I had the advantage of being a farm boy who went to university, so I could deal with both types of employees.

Absolutely the worst employees for me and other supervisors to deal with were 20-somethings during the boom years up to the Panic of 2008, who would simply quit and get another job across the street if they weren't made Director of the department within a month of being hired as a seasonal labourer. It wasn't just me; the union job steward, a traditional enemy of the supervisor class, once told me he felt like grabbing some of those Millennials and slapping them around. Fortunately the problem soon resolved itself after the Panic, when these kids found out that no one would hire them.

Pint-Size Stories #1 You took 3,000 photos at a balloon event? I spend all day at the Calgary Stampede or hiking in the mountains and feel daring if I take as many as 70.

The Devil's Work *"The earliest use of the term androids that I recall was by John S. Williamson in the 1930s."* I published an article about the etymology of android and robot in OPUNTIA #4 (page 4, November 1991). The word android dates back to at least 1727 according to the OXFORD DICTIONARY, although the earliest use of it I have seen myself was in the 1823-08-16 issue of THE MIRROR, a British periodical. As you mentioned, Karl Capek introduced the word robot into the English language with his 1923 play R.U.R.. What I discovered was that the two words have reversed their meaning since the 1920s. An android was originally a mechanical man and a robot an organic creature.

Edgar's Journal #10 Well done again. I shall file this issue separately with my Poe collection. During the summer of 2011, I drove up to central-east Alberta and tracked down the ghost village (it was never a town) of Poe. It was founded in 1909 as a railroad siding and so named because it was the birth centennial of Edgar Allan Poe and the railway vice-president was a big fan. All that is left today is an unmarked grain elevator, used for storage by the farmer who owns the land the village and siding were once on. There are no signs marking the site; I had to navigate there using old maps. The main reason I was up there was to track down a mysterious post office called Sandstorm Lake, said to be a few kilometres south of Poe. The lake was drained in 1919, and although the Canadian Post Office prepared

a postmark for it, the office apparently never opened. **-10-**
The real mystery to me was why it was called Sandstorm Lake. That area of Alberta is one of the wettest in the province. When the homesteaders arrived, the first thing they did collectively was not to build a church or school but to organize a Drainage District to dig huge ditches to dry off the land. It therefore didn't make sense that they would name a lake Sandstorm, which might be plausible in southern Alberta, which is semi-desert. I finally uncovered the reason; the first settlers were Arvid and Ethel Sandstrom from Norway, and the lake name was mis-spelled and mis-pronounced by later homesteaders.

Vicki, you mentioned the anguish of caring for an 88-year-old relative who needs help but can't afford it. I went through this twice with my mother and uncle (her older brother) and was executor for their estates. My greatest fear was that I would spend my retirement as a caregiver, but after long illnesses they both died before I retired. You can't let yourself be consumed by guilt. You are entitled to your life as well. What I did was to set aside two or three days a week to visit them and do errands for them. The rest of the week I led my own life, and if something came up for them that needed attention I would set it aside until the designated day. If I am ever in that situation as an elder, I will simply stop taking my medication and speed up the process. I hope I die instantaneously like my father; he was walking out to his car and suddenly fell dead on the sidewalk.

SEEN IN THE LITERATURE

noticed by Dale Speirs

Gell-Mann, Murray and M. Ruhlenb (2011) **The origin and evolution of word order.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 108:17290-17295

"Recent work in comparative linguistics suggests that all, or almost all, attested human languages may derive from a single earlier language. If that is so, then this language, like nearly all extant languages, most likely had a basic ordering of the subject (S), verb (V), and object (O) in a declarative sentence of the type "the man (S) killed (V) the bear (O)." When one compares the distribution of the existing structural types with the putative phylogenetic tree of human languages, four conclusions may be drawn. (i) The word order in the ancestral language was SOV. (ii) Except for cases of diffusion, the direction of syntactic change, when it occurs, has been for the most part SOV > SVO and, beyond that, SVO > VSO/VOS with a subsequent reversion to SVO occurring occasionally. Reversion to SOV occurs only through diffusion. (iii) Diffusion, although important, is not the dominant process in the evolution of word order. (iv) The two extremely rare word orders (OVS and OSV) derive directly from SOV. We know of no evidence that SOV, SVO, or any other word order confers any selective advantage in evolution."

Biedunkiewicz, A., and E. Ejdyś (2011) **Icicles as carriers of yeast-like fungi potentially pathogenic to human.** AEROBIOLOGIA 27:333–337

"Most of the area of the globe is characterized by a low temperature, and the ice being formed constitutes a specific habitat for the growth of psychrotolerant microbes. They are accompanied by contaminants dripping from flat surfaces or falling down from the atmosphere. The objective of this study was, therefore, to detect the presence of potentially pathogenic fungi in ice formations found at the height of up to 2 m. The collected ice formations were transported to the laboratory and left for free melting. Yeast-like fungi were isolated with the use of a standard research procedure, typical of diagnostic mycological laboratories. The icicles examined were found to contain a high number of fungi, reaching 15,180 cfu/dm³ that originated from 12 species belonging to 2 genera: Debaryomyces and Candida. The predominating fungi were these of the genus Candida—constituting as much as 83.33% of the isolates. The study revealed also potential pathogens Candida krusei, C. tropicalis, and C. utilis. The presence of fungi in the material examined allows ice formations to be treated as a reservoir and a vector of pathogenic factors and a temporary air filter."

Speirs: Remember when we were kids and used to lick icicles?

Palacios, M.A., et al (2011) **InfoBiology by printed arrays of microorganism colonies for timed and on-demand release of messages.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 108:16510-16514

bio- and "photociphers" along with controlled timed-release exemplify the capabilities of InfoBiology, which could enable biometrics, communication through compromised channels, easy-to-read barcoding of biological products, or provide a deterrent to counterfeiting."

Little, L.K. (2011) **Plague historians in lab coats.** PAST AND PRESENT 213:267-290

This paper looks at the use of DNA sequencing on archaeological remains of humans to verify that plague outbreaks in ancient times were really plague (caused by the bacterium *Yersinia pestis*) and not some other disease. Using DNA sampling on increasing numbers of human skeletons studied shows that bubonic plague originated in China and spread several times into Europe. The first outbreak was the Justinian Pandemic from 541 to 750, the second was the Black Death from 1330 to 1353, and the third was the Hong Kong outbreak from 1894 to 1899. As human population density and travel speeds improved, each succeeding wave spread faster. Studies also show that rats were a host of a flea species that carried the disease but not the main reason for the rapid spread of the disease. Rather, human fleas (a different species than the rat flea) were very good carriers.

"This paper presents a proof-of-principle method, called InfoBiology, to write and encode data using arrays of genetically engineered strains of Escherichia coli with fluorescent proteins as phenotypic markers. In InfoBiology, we encode, send, and release information using living organisms as carriers of data. Genetically engineered systems offer exquisite control of both genotype and phenotype. Living systems also offer the possibility for timed release of information as phenotypic features can take hours or days to develop. We use growth media and chemically induced gene expression as cipher keys or "biociphers" to develop encoded messages. The messages, called Steganography by Printed Arrays of Microbes (SPAM), consist of a matrix of spots generated by seven strains of E. coli, with each strain expressing a different fluorescent protein. The coding scheme for these arrays relies on strings of paired, septenary digits, where each pair represents an alphanumeric character. In addition, the photophysical properties of the fluorescent proteins offer another method for ciphering messages. Unique combinations of excited and emitted wavelengths generate distinct fluorescent patterns. This paper shows a new form of steganography based on information from engineered living systems. The combination of

Way, J.C., et al (2011) **Sun-driven microbial synthesis of chemicals in space.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 10:359–364

"Long space flights and planetary settlement will require sources of nutrition and chemicals that must be generated in space. This will include not only amino acids and vitamins but also oxygen, all of which can be generated by means of biosynthesis. Synthetic biology has the potential to generate organisms designed for supplying human nutritional needs in space. Photosynthetic microbes may be ideal for this purpose, as they are more efficient per volume cultivated than green plants at conversion of light to chemical energy, biomass and nutritional molecules. In addition, microbes are easier and faster to genetically engineer, facilitating not only design and terrestrial manufacture of organisms optimized for growth and nutrient production in the artificial conditions of space, but superior ability in space to develop organisms suited to newly discovered environments. The rapid ability to adapt and create new microbes to suit new circumstances when in space offers significant potential for risk reduction. Development of sun-driven microbial production of nutritional chemicals would also have terrestrial benefits in commerce and sustainability. A synthetic biology approach to chemical production would not be based on fossil fuels as such fuels do not exist on other planets. This approach would highlight a synergistic relationship between outer space and 'spaceship

earth', illustrating NASA's role in stimulating technology development with terrestrial application. Two specific approaches deserve consideration: production by traditional photosynthetic microbes, or by the newly appreciated capacity of some bacteria to absorb electric current (e.g. solar panels) to drive metabolism. Palatability and sensory stimulation are a key part of food consumption and could be engineered into microbes."

O'Fallona, B.D., and L. Fehren-Schmitz (2011) **Native Americans experienced a strong population bottleneck coincident with European contact.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 108:20444–20448

"In this study we use a large dataset including both ancient and contemporary mitochondrial DNA to construct a high-resolution portrait of the Holocene and late Pleistocene population size of indigenous Americans. Our reconstruction suggests that Native Americans suffered a significant, although transient, contraction in population size some 500 y before the present, during which female effective size was reduced by ~50%. These results support analyses of historical records indicating that European colonization induced widespread mortality among indigenous Americans."

Marshall, J.R., and R.L. Mancinelli (2011) **The effect of spacecraft descent engine plumes on spore transfer to planetary surfaces: Phoenix as a test case.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 10:335-340

"Laboratory experiments were conducted to determine the effect of descent-engine plumes on the scouring of surface (microbial) contaminants from a spacecraft. A simulated touchdown of a half-scale lander engine and deck configuration was conducted at Mars atmospheric pressure in the NASA Ames Planetary Aeolian Laboratory. Low-density particles were used for the soil simulant to emulate the lower Martian gravity. The underside of the model had small witness plates with controlled microbial surface populations and particle impact detectors. For both steady-state engine thrust (Viking) and pulsed engine thrust (Phoenix), the exhaust plumes from the engines violently excavated the soil and produced particle-laden eddies beneath the lander that sandblasted the lander underside. The result was nearly complete erosion of microbial contaminants from the spacecraft model with their subsequent deposition in the surrounding area. It is concluded that different planetary protection cleanliness levels for different parts of a spacecraft do not necessarily prevent soil contamination because these cleaning strategies evolved without consideration of the effects of the descent engine plumes."

Speirs: We may be seeding life on other planets unknowingly.

Cadee, G.C. (2011) *Hydrobia* as "Jonah in the whale": Shell repair after passing through the digestive tract of shelducks alive. PALAIOS 26:245-249

"In the Wadden Sea, shell repair frequency in the small gastropod Hydrobia ulvae varied from 2.8% to 11.2%. On tidal flats of the Mok, a small bay on the island of Texel, The Netherlands, in the Wadden Sea, higher repair frequencies varying from 11.8% to 41.8% were measured. The shelduck, Tadorna tadorna, a predator of Hydrobia, occurs here in densities far above average densities for the Wadden Sea. Shelducks ingest their prey whole and crush the shells of H. ulvae internally. Live specimens of H. ulvae were collected from shelduck feces. Those with intact operculum and only a damaged outer aperture rim of the shell were kept in aquaria and repaired their shell rapidly. This indicates that predators that ingest shelled prey can also leave repair scars on shells. Such scars, however, are indistinguishable from those resulting from failed predation by predators using such pre-ingestive shell breakage as decapod crustaceans."

LETTERS TO THE EDITOR

[Editor's remarks in square brackets]

FROM: Lloyd Penney
1706 - 24 Eva Road
Etobicoke, Ontario M9C 2B2

2011-07-22

The reason one fan group doesn't talk to another fan group is that they truly have little in common, and do not have the urge to communicate with others the way we do. I always called this the Balkanization of fandom, but I think atomization is better. We are each our own little fandom, with our only concern our own entertainment, and no social aspect at all. If these groups have no interest in their history, it's often because they have no idea of their own history at all, or have never pondered where this whole fandom thing comes from. At least we had the benefit of some fans who cared enough to do the research, write it down, and publish it.

[I've met SF fans who only communicate on blogs specializing in one television show. My conclusion is that they are marginal fans and pre-1960s would not have been in clubs or zine publishing anyway. After all, most people who own a dog do not belong to a kennel club. Someone who restores vintage Volkswagen Beetles as a hobby may have no interest in Detroit muscle cars or riceburners, nor should he be expected to.]

FROM: Joseph Nicholas
15 Janson Road
Tottenham, London N15 4JU, England

2011-06-02

In one of your FAPA mailing comments you say that "*in the long run, the meat-eating humans will do better than the vegetarians*" but this is true only if the meat is sourced from open pastureland or hunted in the wild, where stock densities are controlled by the scarcity of resources and thus kept within sustainable limits. It will not be true of meat produced by modern livestock practices, with animals produced indoors or on feedlots, which require huge resource inputs, produce vast quantities of slurry, ensure the spread of animal pathogens, and are unsustainable in the long run.

[Coming from a cattle ranch where our herd grazed on pasture in the summer and ate hay in the winter baled from our fields, I quite agree with you. I don't expect any serious change for at least a decade or so, but as Peak Oil begins to make it cheaper to graze cattle than to feed them grain in a lot, then the big four producers who produce 80% of the beef in North America will suffer. Most people don't realize that the feedlot system of beef production didn't develop until the 1960s. There was a time within human memory when most beef came off a farm, not a factory feedlot.]

FROM: Stuart Stratu
Box 35
Marrickville, New South Wales 2204, Australia

2011-06-09

I love the idea of amateur press associations but was wondering about the annual fee to cover postage. You mentioned the bundle of zines which seems to me to be pretty chunky, so for overseas contributors that could be pricey.

[Some apas allow overseas contributors to e-mail their copy and the editor will print it and post it for less than what it would cost to ship over a printed bundle. I know Australia has ANZAPA and undoubtedly other apas you could find on Google. The annual postage fee is still cheaper than mailing out individual copies.]

I Also Heard From: Anna Banana, Mark Bloch, Theo Nelson, John Held Jr, Murray Moore, Sheryl Birkhead, Franz Zrilich

WHEN WORDS COLLIDE 2011: FOLLOW-UP -16-

My report on the Calgary readercon When Words Collide was in OPUNTIA #71. A month later I received the following information from the concomm about the ten most popular panels of the convention by attendance.

1] Turning History into Fiction	71
2] Dead Men Do Talk	70
3] Silencing Your Inner Saboteur	66
4] Fostering the Creative Process	63
5] Live Action Slush - Edge	53
6] Mysticism, Religion and Magic in Fiction	51
7] How to Write a Good Pitch and Query	50
8] Live Action Slush - RJS & Bundoran	48
9] Let's Talk About Sex	48
10] Writing Difficult Scenes	44

The titles of most are self-explanatory, but to explain a few, #2 was a presentation by a police detective about forensics, and #3 was how to keep from holding yourself back because of fear of rejection. #5 and #8 were slush pile readings by editors and publishers with constructive criticism.

Analyze this as you will.