

OPUNTIA

70.3

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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 Steve and Vicki Ogden for 56 pages in FAPA #293, and Robert Sabella for 46 pages in FAPA #294.

MAILING COMMENTS ON FAPA #293

FAPA #293 received in Calgary on November 24, 2010.

Fandom Forever #1 Welcome aboard to FAPA! It will be interesting to read about Danish SF fandom. We anglophones tend to be at a disadvantage in seeing what is going on in the rest of the world that doesn't happen to speak English, so we always appreciate someone who can breach the language barrier. I was surprised that Danish fandom dated from the 1960s in your history, and fanzines only from the 1970s. I would have thought it would be older than that.

"No Danish fan group have (so far) survived for long without beginning a fanzine in some form." This rule seems to apply elsewhere as well, and not only within SF fandom. I did a history of philately in Alberta in 1992 and was able to track the success of a stamp club by whether they published a club bulletin. Those that didn't experienced a sudden drop in membership after ceasing a bulletin. Today people say that a club can have a Website, but

the problem is that you have to go to the Website, -2- so if you keep forgetting, eventually you lose track and fall away. A bulletin that comes to you via real mail can sit on the table and remind you to read it.

"Another thing quite striking as I read through the fanzines chronologically is the short memory of fandom, the lack of interest for the past." In the 1990s, Garth Spencer wrote a history of Canadian SF fandom which I published in OPUNTIA. He concluded there was no timebinding of Canadian fans between generations, nor between cities of the same generation because of Canada's vast geography and low population. Today this has extended further to the point where most Canadian fans in the same city at the same time won't interact with each other unless they watch the same television show. The Trekkies don't talk to the steampunks, and the browncoats have zero interest in literary fiction. I call this the atomization of fandom.

At one time I was doing a subject index of every Canadian zine I received, not just SF. I gave it up not because it was too much work but because I realized that no one was interested in it. Even in the historical articles written by fannish elders, they seldom cite specific titles and page numbers so others can track down the source, via archived zines being posted on efanzines.com and other such sites. There is no institutional memory in SF fandom anymore.

Alphabet Soup #68 *"I don't see the point of giving Fred Pohl the [Hugo] award as best amateur writer. He's not just a pro writer. He's the most senior pro writer in the field."* Well, if the voters can give the Best Fanzine award to a podcast, I suppose it isn't much worse giving the Best Fan Writer award to a professional writer. It would be like giving a Nobel Peace Prize to a newly-elected American president who hadn't done anything.

"I think declining fanac can be blamed on entropy." I suggest it is a case of transmutation of the elements. Instead of paper zines, there will be blogs. A sense of history will vanish and be replaced by lurkers waiting to post comments as soon as they are made because anything that scrolls down off the screen will be instantly forgotten. Instead of dressing up in costumes from an old movie or television show, fans will dress up from a current show, and drop their interest in it if the show is canceled.

"I've been ignoring the news for the last several years, and I don't think I've missed anything I need to know." I don't follow the news *per se* but just economic data on blogs out of self-interest to defend my investments for my old age. I quit reading the newspapers many years ago because they miss the real stuff while running mostly local crime stories and syndicated news about Hollywood starlets. It's tiresome to keep reading about some special-interest group complaining because they didn't get their entitlements.

Ellipsis *"If a little mental activity can hold off the dementia I reckon it's worth it."* Which I why I do sudoku puzzles every day and read extensively.

Adventures On Earth #17 Re: your elderly father-in-law emigrating from Italy to get away from discrimination and poverty on the farm. On both sides of my family (Finland and Scotland) my ancestors who came to Canada did so because they were all younger sons who had no hope of inheriting the farm or buying their own, so they came out to the new lands to homestead.

Voice Of The Habu *"... economists appear to have the amazing ability to talk about ending inflation while still expecting housing to always increase."* It is central bank policy everywhere to try and maintain inflation in the 1% to 3% range, which is low enough not to alarm the sheeple but high enough that governments can pay down (but never pay off completely) their debts with depreciated fiat currency. Inflation is a type of hidden taxation to pay for government spending. This is why general deflation terrorizes governments, because that means currency becomes more valuable and thus the debt more onerous.

I don't know about housing policy in the USA, but in Canada the federal Tories encouraged the housing boom because voters trapped by a heavy mortgage and no spare cash are most likely to vote for the Conservatives.

This type of voter is only one paycheque away from disaster, and thus fearful of change, higher taxes, and Liberals. Trouble is, the housing bubble in Canada has just peaked and is starting to turn down, about where the USA was in late 2005.

Ouroborus #25 As always, a substantial reference work, this time with the history of cartoonist Al Williamson. That was quite a career he had, starting off with Tarzan comics in the 1940s and on to the Star Wars comics in the 1980s. One minor nit-pick: some of the illustrations were too low in resolution to justify reproducing at full 8.5 x 11 size.

Visions Of Paradise #157 The recent Hugo Awards at the World SF Convention were a travesty. Best Fan Writer went to professional author Frederik Pohl because he had a blog. Best Fanzine went to a podcast of natter. I blame the committee, which should have reclassified or disqualified those nominations.

Taral Wayne's history of furry fandom was interesting. I have nothing against people dressing up as cartoon characters, but I always wondered how they could take the heat of those full-body outfits. It must be awkward going to the toilet in those outfits.

Lofgeornost #101 *"Inadequate or sloppy documentation is a widespread problem in books about science fiction."* This is also a problem in philately. I have published hundreds of articles

about postal history and am among the few authors who cite their references. My book THE HISTORY OF MAIL BOMBS has 326 references, which drew surprised comments from reviewers in philatelic magazines who are not used to seeing authors who cite their data sources.

Sweet Jane #63 Re: your Finnish grandfather never having gotten American citizenship and if the 14th Amendment was repealed and you were deported, no, you wouldn't have to go to Russia just because Finland was a duchy of it when Isak Alfred Eklund emigrated therefrom. You would be shipped to Finland but Suomalais is as difficult to learn as Russian. However, your family name indicates your grandfather was from the 5% minority Swedish population of Finland, so it would probably be easier to learn that language. Plus, most Finns learn English these days.

"Washington State votes entirely by mail." I'm astonished to hear that. No polling stations whatsoever? Federal and provincial elections in Canada have mail-in ballots for expatriates, but the masses are expected to visit their polling stations in person. Calgary tried mail-in ballots for municipal elections in 2004, but it was a fiasco. One alderman was elected by about 300 immigrants who all shared the same box number, which Canada Post later revealed to the court was in her husband's name. She never took office and vanished from public life. Her husband went up before a judge and got his wrists slapped.

Loved your short story about Earl "Pigg" Foss, the drunken lumberjack SF fan. He's not too far from reality for some of us. Calgary conventions used to be plagued by a female version who weighed more than any two men in the room, and loudly intruded herself into any conversation or panel. She wore spandex clothing tight enough that every man who saw her was put off sex for a couple of weeks.

MAILING COMMENTS ON FAPA #294

FAPA #294 received in Calgary on March 4, 2011.

Alphabet Soup #69 *"I saw William Shatner at the 1967 Westercon. By now he must be sort of a mobile historical monument."* Last year the time came for the Canadian government to appoint a new Governor-General, the previous one having finished her 7-year term. Among those mentioned as possibilities was Shatner, and there was a movement among fans to campaign on his behalf. He didn't take it seriously but did say he would serve if asked. I think he actually would have made a reasonably good G-G. He's used to public speaking, and knows how to cut ribbons and declare this stone well and truly laid. One of his duties would have been to read the Speech From The Throne at the opening of each session of the House of Commons. Normally few Canadians pay attention to the Speech, but if he was

reading it, I'll bet the television ratings would have been through the roof as every Canuck tuned in to see if he read it the way he acted. "This government ... WILL ... enact ... the NEW legislation ... as promised ... IN the election."

A Propos de Rien *"Economists no longer talk of ending inflation. They want controlled inflation, 2 - 3% per year."* They never did talk of ending inflation. Any type of economic system which allows debt will inevitably build up that debt over several generations until it crushes society. 3,000 years of human history have demonstrated there are only a few methods to deal with the problem. Biblical jubilees, where all debts were forgiven every fifty years, are no longer doable in today's world. Hyperinflation wipes out all debt by rendering it worthless, but that too is not doable for reasonable governments.

Low inflation, such as today's economists want, depreciates the debt slowly enough that the average person doesn't realize what is happening. The disadvantage of that method is that it also depreciates income. People think they are well off if they get an annual 3% pay rise, and don't understand that they are going backwards because the true inflation rate is much higher (visit www.shadowstats.com for the actual inflation rates). In every nation, the government is the largest debtor, so naturally they want to depreciate their debt by inflating the currency.

Fandom Forever #2 You worry in a couple of places about being sued for copyright violation if you reprint from old fanzines. I wouldn't worry too much. If you post a reprint on the Internet, where it can be spotted by search engines, then someone might fuss. If you just reprint it in a fanzine or limited-circulation chapbook, then it is unlikely that anyone could find it at random. The great advantage of the Papernet is that search engines can't do fishing expeditions; the authorities or lawyers have to know about you in advance and have to track down a physical copy.

If the fan is dead, it is unlikely that any next-of-kin would fuss about a reprinted article. I've only reprinted a few items in OPUNTIA, including a 1948 Toronto newspaper article about the first SF world convention in Canada, and have never worried about being sued. If you are reprinting an old story from a long-dead writer, there would be little to worry about. Alternatively, if you would have trouble sleeping at night worrying about being sued, reprint the story as a separate stand-alone item, with no credit listed to yourself. Enclose it as an insert tipped in to your regular zine but don't mention it in the zine. No one would be able to prove to legal standards that it was you, and given that the financial return would be zero, it is unlikely to be worth the trouble to sue even if they did. There is a rule among lawyers that there is no point in suing paupers or multi-billionaires; the former aren't worth the expense and the latter will fight back hard enough to hurt.

Re: the Danish Jules Verne Society. One problem with groups like this is that there may not be much new to write about if you don't live near research sources. This is particularly true with foreign-language authors whom you are reading in translation. I wouldn't be able to add anything new about Verne, or, for that matter, the Danish story about the Little Mermaid. As another example, I have nothing new to add about Lovecraft, while Ken Faig Jr has been able to research databases in the USA about Lovecraft that would be difficult or expensive to use in Calgary. Someday I am going to do some research about Harry Longabaugh, better known as the Sundance Kid, who lived in Calgary for a year during the days of the Wild West.

You ask me about OPUNTIA's publishing system: "*Why do you divide them instead of just publishing one big issue?*" A very common reason for zines dying is that they grow too big and the editor gives up under the heavy workload. When I first started publishing OPUNTIA in March 1991, one of my rules was that it would be small but frequent, so the workload would never be onerous. It is also restricted to four sheets of paper, which keeps it under the 30-gramme increment for postage and allows me to mail it at the first-class letter rate. I've been able to average a monthly publication schedule since I started.

I prepare articles and reviews as separate files, and then pour them into a WordPerfect template. This enables me to work on

articles and reviews in incremental fashion as I find the time, without worrying about holding open space in the final template. I use the Isaac Asimov method of writing; he always had a dozen projects on the go at once, and switched back and forth as the mood took him. At any given moment, I have a dozen extended book reviews, and as many sercon articles in progress, not to mention all my postal history articles for publication in philatelic magazines. I also have separate documents for columns such as zine reviews and "Seen In The Literature", for which I can add listings one item at a time as I do them. When it comes time to assemble an issue, I simply copy from all the separate documents and paste them into the template, a job which seldom takes more than fifteen minutes.

Lofgeornost #102 Re: Dan Goodman's remark to you about unconscious errors made by writers about another country, such as a Canadian author writing about the Girl Guides in the USA instead of Girl Scouts. One error I've seen in reverse is American authors who refer to a major road in Canada as a Route, instead of a Highway. I like to quote a sentence that any Canadian can instantly translate but an outlander would not understand: "I spilled a double-double Timmies on my boss, and went to the pogeys without a toonie to my name". I see the same sort of error in descriptions, such as the one author who wrote about being in Calgary at sunset and watching the adjacent Rocky Mountains gleaming golden. Since the sun sets behind the Rockies, the

skyline doesn't gleam golden, it just turns dark blue, then purple, then black.

You write: "*Science fiction contains a large body of time-travel stories that demonstrate the incorruptibility of history, its resistance to any attempt to divert it from the course it took in the homeworld of the protagonists.*" This is what is known as the Tide of History theory, the idea that while individuals could change the details, the big picture cannot be changed because of the weight of socio-economic factors. For example, if not Hitler, then one of his rabbleroising enemies would have succeeded, because the German people were humiliated and wanted revenge. In scientific chaos theory, this is known as the Great Attractor, the idea that while there are an infinite number of universes, a pebble rolling down a mountain slope will still land in the valley, even if it takes a different route in each universe as it randomly bounces down.

Science Fiction Adventure Magazine V6#1 Re: what were the Japanese thinking when they attacked Pearl Harbor. The records are clear that they were hoping to knock out the carrier fleet and then bargain with the Americans for some kind of rubber-for-oil settlement. It was their bad luck and lack of long-range reconnaissance that the carriers were away from Pearl Harbor at the time of the attack. The Japanese also consistently misunderstood the psychology of the American people. -7-

The Battle of Midway was also explicitly fought in the hopes of delivering a knockout blow. Yamamoto and others were well aware that Japan could, as he said, *“run wild for six months, after which I cannot promise anything”*. All of their battles against the USA were intended as overwhelming victories to demoralize the Americans and settle on some sort of treaty. The Japanese were essentially trying a series of double-or-nothing bets, which, as any casino employee can tell you, always ends in tears.

As you mentioned, the USA built an artificial rubber industry in 18 months and *“We probably couldn’t even get the permits to build the factories if we tried doing that today.”* The other helping factor back then was that the chemical industry had lots of oil. The USA was then a net exporter of oil, but today with Peak Oil it would be difficult to repeat the instant factory operation.

I enjoyed your take on how primates might have evolved if a methane release during the Pleistocene had warmed up the Earth just as ape-men were starting to develop. As you wrote, there were have been several lineages, but I suspect that they still all would have declined back down to one species due to competition. In our timeline, *Homo sapiens* has been very intolerant of any large carnivore or omnivore whose habitat overlaps with it. This, to me, is part of the Tide of History.

Science Fiction Adventure Magazine V5#2

-8-

“How long can farming last?” Irrigation farming eventually destroyed every civilization that depended solely on it because it always salinizes the soil. However, other types of farming may last longer. Intensive cropping does deplete nutrients, so that type of farming will run out when the nitrogen supply does, although not for many decades yet. Any kind of crop rotation that uses alfalfa or other legumes will not have this problem. I grew up on a cattle ranch where the only crop we grew was hay to tide the cattle over the winter. Mostly we grazed the cattle on rangeland, which never had to be fertilized by us because the cows did it themselves. In the long run, the meat-eating humans will do better than the vegetarians.

Speaking as a former pest control officer with the Calgary Parks Dept., my observation, and that of many others, is that pest control is a problem only when it is not done right. The traditional approach was to spray anything that moves, but nowadays every pest control operation uses IPM (Integrated Pest Management), which takes into account life cycles, biodiversity, and priority. The latter is the most difficult for the general public to accept, that we will not blanket spray their local park just because it has some dandelions. Monocultures are the most susceptible to pests, which is why they don’t occur in nature, because what we call pests are just unwanted biodiversity.

Release The Hounds #3 Re: your comments about the movie NETWORK being an early case of reality television because a group of terrorists had their own show. By coincidence I have just watched the DVD of the movie, and missed the obvious comparison with today's reality shows. What worries me is that too many people today are watching reality shows to pay attention to the actual reality around them.

CONVENTIONEERING IN COWTOWN

by Dale Speirs

Calgary's annual SF convention is Con-Version, which has been very shaky in recent years as the Boomers give way to the Internet generation. I've seen this happen with the local aquarium show as well; it's part of what Robert Putnam called bowling alone, in his book of that title.

Con-Version 26 was held in October 2010 on the weekend after Thanksgiving. I didn't go to it. I was talking to someone with inside knowledge of Con-Version 26, and he told me that the organizers will be taking a serious loss. I hope this isn't so, because this will destroy Con-Version's reputation built up over the years as a well-run and profitable convention. The main problem seems to be that Trekkies are thin on the ground

nowadays, and certainly not enough of them to pay for five minor actors from the same series. Had there been a diversity, with one for the teenage-vampires-in-love crowd, another for steampunkers, and so on for other currently-airing television shows, the turnout might have been better.

Another problem cited to me was lack of advertising, especially in the traditional hard-copy ways such as flyers, bookmarks, and brochures. The Internet generation seems to assume that everyone will come to their Website, forgetting that people who don't know about it certainly are not going to search for it. Word of mouth is unreliable among the established SF fans, and none of it reaches people who had no idea there is such a thing as an SF convention.

The literary SF crowd in Calgary have decided to put on a convention this year called When Words Collide, for August 12 to 14, 2011. These are the Boomers who made Con-Version a success for years as a literary/general convention, and also brought the World Fantasy Convention to Cowtown in 2008. I spoke with one of the principals involved who has been con-running for years, and I have every confidence in the committee.

When Words Collide will be mainly SF, but will bring in mystery and romance writers as well, hence the punning title of the convention. Details at: www.whenwordscollide.org

Charnoz, S., J. Salmon, and A. Crida (2010) **The recent formation of Saturn's moonlets from viscous spreading of the main rings.** NATURE 465:752-754

"The regular satellites of the giant planets are believed to have finished their accretion concurrent with the planets, about 4.5 Gyr ago. A population of Saturn's small moons orbiting just outside the main rings are dynamically young (less than 10^7 yr old), which is inconsistent with the formation timescale for the regular satellites. They are also under-dense ($\sim 600 \text{ kg/m}^3$) and show spectral characteristics similar to those of the main rings. It has been suggested that they accreted at the rings' edge, but hitherto it has been impossible to model the formation process fully owing to a lack of computational power. Here we report a hybrid simulation in which the viscous spreading of Saturn's rings beyond the Roche limit (the distance beyond which the rings are gravitationally unstable) gives rise to the small moons. The current confinement of the main rings and the existence of the dusty F ring are shown to be direct consequences of the coupling of viscous evolution and satellite formation. Saturn's rings, like a mini protoplanetary disk, may be the last place where accretion was recently active in the Solar System, some 10^6 - 10^7 yr ago."

A formal test of the theory of universal common ancestry. NATURE 465:219-222

"As first suggested by Darwin, the theory of Universal Common Ancestry posits that all extant terrestrial organisms share a common genetic heritage, each being the genealogical descendant of a single species from the distant past. Although UCA is widely assumed, it has rarely been subjected to formal quantitative testing, and this has led to critical commentary emphasizing the intrinsic technical difficulties in empirically evaluating a theory of such broad scope. Furthermore, several researchers have proposed that early life was characterized by rampant horizontal gene transfer, leading some to question the monophyly of life. Here I provide the first, to my knowledge, formal, fundamental test of UCA, without assuming that sequence similarity implies genetic kinship. I test UCA by applying model selection theory to molecular phylogenies, focusing on a set of ubiquitously conserved proteins that are proposed to be orthologous. Among a wide range of biological models involving the independent ancestry of major taxonomic groups, the model selection tests are found to overwhelmingly support UCA irrespective of the presence of horizontal gene transfer and symbiotic fusion events."

Speirs: Horizontal gene transfer refers to unicellular organisms trading or absorbing each other's DNA or RNA by non-sexual

means. The early life forms lived in a Mixmaster world, where gene flow kept them all as part of one giant gene pool. Eventually the eukaryotes, from which we are descended, developed a nucleus to protect their own genes and reduce the mixing from others, thus allowing speciation and specialization.

Forgan, D.H., and R.C. Nichol (2011) **A failure of serendipity: the Square Kilometre Array will struggle to eavesdrop on human-like extraterrestrial intelligence.** INTERNATIONAL JOURNAL OF ASTROBIOLOGY 10:77-81

"The Square Kilometre Array (SKA) will operate in frequency ranges often used by military radar and other communications technology. It has been shown that if extraterrestrial intelligences (ETIs) communicate using similar technology, then the SKA should be able to detect such transmissions up to distances of ~ 100 pc (~ 300 light years) from Earth. However, mankind has greatly improved its communications technology over the last century, dramatically reducing signal leakage and making the Earth 'radio quiet'. If ETIs follow the same pattern as the human race, will we be able to detect their signal leakage before they become radio quiet? We investigate this question using Monte Carlo realization techniques to simulate the growth and evolution of intelligent life in the Galaxy. We show that if civilizations are 'human' in nature (i.e. they are only 'radio loud' for ~ 100 years,

and can only detect each other with an SKA-like instrument out to 100 pc, within a maximum communication time of 100 years), then the probability for such civilizations accidentally detecting each other is low ($\sim 10^{-7}$), much lower than if other, dedicated communication techniques are permissible (e.g. optical SETI or neutrino communication)."

Speirs: During the first century of broadcast radio and television, the Earth became one of the brightest spots in the galaxy in the radio frequency spectrum. The advent of cable television and low-power wireless gadgets such as cellphones has reduced the radio brightness of our planet, so that we are no longer as conspicuous to the rest of the galaxy as we used to be. As this paper argues, if other technological civilizations behave the same way, then the odds of SETI detecting any alien broadcasts are vanishingly small.

Kainzinger, A. (2011) **The mathematics in the structures of Stonehenge.** ARCHIVES OF THE HISTORY OF THE EXACT SCIENCES 65:67-97

"On the basis of oral tradition and mnemonic artifacts illiterate ancient civilizations were able to attain an adequate level of knowledge. The Neolithic and Bronze Age earthworks and circles are such mnemonic artifacts.

Explanatory models are given for the shape of the stone formations and the ditch of Stonehenge reflecting the circular and specific non-circular shapes of these structures. The basic mathematical concepts are Pythagorean triangles, thus adopting the construction procedures of the Neolithic circular ditches of Central Europe in the fifth Millennium BC and later earthworks and stone circles in Britain and Brittany. This knowledge was extended with new elliptical concepts. Approximations for the values of pi and the square root of 2 are encoded in the henge. All constructions were performed using a standardized "Babylonian" metrology that shows a remarkable consistency and comprehensible development over some 14 centuries."

Cooke, C.A., et al (2011) Pre-Colombian mercury pollution associated with the smelting of argentiferous ores in the Bolivian Andes. AMBIO 40:18-25

"The development of the mercury (Hg) amalgamation process in the mid-sixteenth century triggered the onset of large-scale Hg mining in both the Old and New Worlds. However, ancient Hg emissions associated with amalgamation and earlier mining efforts remain poorly constrained. Using a geochemical time-series generated from lake sediments near Cerro Rico de Potosi', once the world's largest silver deposit, we demonstrate that pre-Colonial smelting of Andean silver ores generated

substantial Hg emissions as early as the twelfth century. Peak sediment Hg concentrations and fluxes are associated with smelting and exceed background values by approximately 20-fold and 22-fold, respectively. The sediment inventory of this early Hg pollution more than doubles that associated with extensive amalgamation following Spanish control of the mine (1574–1900 AD). Global measurements of Hg from economic ores sampled world-wide indicate that the phenomenon of Hg enrichment in non-ferrous ores is widespread. The results presented here imply that indigenous smelting constitutes a previously unrecognized source of early Hg pollution, given naturally elevated Hg in economic silver deposits."

Speirs: There is a myth propagated by greenies that aboriginal tribes and ancient peoples lived in harmony with nature, and that pollution began with the Industrial Revolution. If the environmental impact of ancient peoples was smaller, it was only because they didn't have the population to pollute as heavily as we do today, not because they respected their environment. I've listed articles in previous issues about aboriginal tribes whose presence at present-day uninhabited northern Canadian lakes can still be detected centuries later because they polluted the lakes. In Europe, soil studies have pinpointed modern forests that haven't been farms since the Black Plague wiped out the farmers but left the soils permanently altered.

Bischoff, G.C.O., R.R. Coenraads, and J. Lusk (1992) **Microbial accumulation of gold: an example from Venezuela.** NEUES JAHRBUCH FÜR GEOLOGIE UND PALÄONTOLOGIE: ABHANDLUNGEN 185:131-159

This is a study of microscopic fossils collected from the flood plains of Venezuela in the alluvial gold and diamond fields. Alluvial minerals are those which are washed out by erosion from the mother lode in the bedrock. The microfossils were hollow filaments of pure gold growing out from a central point but not from inorganic causes. It is known that bacteria growing in metal-rich environments will accumulate a specific metal around their filaments because of electrostatic charges of the cell plasma and membranes. If the metal accumulates faster than the bacterium is growing, it will become incased inside the metal, such as gold, and then be sealed off and die from suffocation. This process continues after death because the electrostatic charges continue to accumulate in a chain reaction until all the gold with a few millimetres is precipitated. If the bacterium can grow faster than the gold precipitation, it will produce a tiny grain of gold visible to the naked eye before it finally dies. These grains will accumulate by differential gravitational sorting (because gold is heavier than other minerals) as the groundwater flows through the soil and eventually produce gold dust or nuggets.

Drake, N.A., et al (2011) **Ancient watercourses and biogeography of the Sahara explain the peopling of the desert.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 108:458-462

"Evidence increasingly suggests that sub-Saharan Africa is at the center of human evolution and understanding routes of dispersal "out of Africa" is thus becoming increasingly important. The Sahara Desert is considered by many to be an obstacle to these dispersals and a Nile corridor route has been proposed to cross it. Here we provide evidence that the Sahara was not an effective barrier and indicate how both animals and humans populated it during past humid phases. Analysis of the zoogeography of the Sahara shows that more animals crossed via this route than used the Nile corridor. Furthermore, many of these species are aquatic. This dispersal was possible because during the Holocene humid period the region contained a series of linked lakes, rivers, and inland deltas comprising a large interlinked waterway, channeling water and animals into and across the Sahara, thus facilitating these dispersals. This system was last active in the early Holocene when many species appear to have occupied the entire Sahara. However, species that require deep water did not reach northern regions because of weak hydrological connections. Human dispersals were influenced by this distribution; Nilo-Saharan speakers hunting aquatic fauna with barbed bone points occupied the southern Sahara,

while people hunting Savannah fauna with the bow and arrow spread southward. The dating of lacustrine sediments show that the "green Sahara" also existed during the last interglacial (~125 ka) and provided green corridors that could have formed dispersal routes at a likely time for the migration of modern humans out of Africa."

Wilmshurst, J.M., et al (2011) **High-precision radiocarbon dating shows recent and rapid initial human colonization of East Polynesia.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 108:1815-1820

"The 15 archipelagos of East Polynesia, including New Zealand, Hawaii, and Rapa Nui, were the last habitable places on earth colonized by prehistoric humans. The timing and pattern of this colonization event has been poorly resolved, with chronologies varying by >1000 y, precluding understanding of cultural change and ecological impacts on these pristine ecosystems. In a meta-analysis of 1,434 radiocarbon dates from the region, reliable short-lived samples reveal that the colonization of East Polynesia occurred in two distinct phases: earliest in the Society Islands A.D. ~1025–1120, four centuries later than previously assumed; then after 70–265 y, dispersal continued in one major pulse to all remaining islands A.D. ~1190–1290. We show that previously supported longer chronologies have relied upon

radiocarbon-dated materials with large sources of error, making them unsuitable for precise dating of recent events. Our empirically based and dramatically shortened chronology for the colonization of East Polynesia resolves longstanding paradoxes and offers a robust explanation for the remarkable uniformity of East Polynesian culture, human biology, and language."

Angst, D., et al (2011) **The end of the fat dodo? A new mass estimate for *Raphus cucullatus*.** NATURWISSENSCHAFTEN 98:233-236

"A new mass estimate for the dodo (*Raphus cucullatus*), based on the lengths of the femur, tibiotarsus and tarsometatarsus, is attempted. The obtained mean mass is 10.2 kg, which is less than previous estimates based on other methods, which ranged from 10.6 to 21.1 kg, and much lower than the 50 lbs reported by a seventeenth-century eyewitness. The new estimated mass, which is similar to that of a large wild turkey, seems more realistic than previous ones and supports the hypothesis that contemporary illustrations of extremely fat dodos were either exaggerations, or based on overfed specimens. Pictures of "fat" dodos may also have been based on individuals exhibiting a display behaviour with puffed out feathers."

Hansen, M.C., et al (2010) **Quantification of global gross forest cover loss.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 107:8650-8655

"A globally consistent methodology using satellite imagery was implemented to quantify gross forest cover loss (GFCL) from 2000 to 2005 and to compare GFCL among biomes, continents, and countries. GFCL is defined as the area of forest cover removed because of any disturbance, including both natural and human-induced causes. GFCL was estimated to be 1,011,000 km² from 2000 to 2005, representing 3.1% (0.6% per year) of the year 2000 estimated total forest area of 32,688,000 km². GFCL expressed as the proportion of year 2000 forest cover was highest in the boreal biome and lowest in the humid tropics. Among continents, North America had the largest total area and largest proportion of year 2000 GFCL. At national scales, Brazil experienced the largest area of GFCL over the study period, 165,000 km², followed by Canada at 160,000 km². Of the countries with >1,000,000 km² of forest cover, the United States exhibited the greatest proportional GFCL and the Democratic Republic of Congo the least. However, GFCL represents only one component of net change, and the processes driving GFCL and rates of recovery from GFCL differ regionally. For example, the majority of estimated GFCL for the boreal biome is due to a naturally induced fire dynamic. To fully characterize global forest change dynamics, remote sensing efforts must extend beyond

estimating GFCL to identify proximate causes of forest cover loss and to estimate recovery rates from GFCL."

Whitley, C.B., and Kramer, K. (2010) **A new explanation for the reproductive woes and midlife decline of Henry VIII.** HISTORICAL JOURNAL 53:827-848

"Henry VIII's first two wives experienced multiple pregnancies culminating in late-term miscarriage, stillbirth, or neonatal mortality. After his fortieth birthday, the king's mental and physical health underwent rapid deterioration. In this article, we argue that both his reproductive troubles and his midlife pathologies can be explained if Henry VIII were positive for the Kell blood group. A Kell negative woman who has multiple pregnancies with a Kell positive male will suffer repeated miscarriages and death of Kell positive fetuses and term infants that occur subsequent to the first Kell positive pregnancy. This pattern is consistent with the pregnancies of Katherine of Aragon and Anne Boleyn. Additionally, Henry VIII may have suffered from McLeod syndrome, a genetic disorder of the Kell blood group system, which is a condition that causes physical and mental impairment consistent with his ailments."

LETTERS TO THE EDITOR

[Editor's remarks in square brackets.]

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

2010-10-03

Recently I read about a discussion at an event in Oregon between Ursula K. LeGuin and Margaret Atwood. I gather it discussed many tropes of SF, and Atwood seemed to be comfortable to be labeled a science fiction writer. Perhaps she is tired of Canadian readers not reading her works and may be looking for a more appreciative audience. I think she may regret her talking squids remark.

[Re: Calgary's SF convention Con-Version] It recently converted from a litcon to a mediacon, which is causing some friction with many of its past committee heads and guests, like Rob Sawyer. Kirstin Morrell is disheartened by this turn of events but we've tried to encourage her to simply start fresh with another convention, start with a one-day event, and go from there. The media barbarians have stolen yet another literary convention to change to their own interests, and the SF readers in Calgary may have to start again.

[I don't consider it to be theft. My observation is that the Old

Guard in Calgary got tired of doing all the work and handed over to those who would, who happen to be media fans. Since they do the work, they get to decide what the themes will be. However, the apparent failure of Con-Version 26 has prompted the literary fans to begin a new readercon called When Words Collide. It will be interesting to see if the media fans try to carry on with Con-Version or just give up and go to the local comics convention, a commercially run operation.]

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I Also Heard From: John Held Jr, Franz Zrillich

WORLD WIDE PARTY #18

2011 will have the 18th annual World Wide Party on June 21st at 21h00 your local time. Invented by Benoit Girard (Québec) and Franz Miklis (Austria), the idea is to get a wave circulating the world of zinesters, mail artists, and SF fans toasting the Papernet. At 21h00, you are requested to raise a glass to your fellow denizens of zinedom. Face to the east and toast those who have already celebrated the WWP. Then toast to the north and south for those in your time zone. Finally, face to the west and toast those yet to celebrate. Write it up for a zine or do some mail art. Have a party, or devise your own method of celebrating.