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Travel Log: From Hussar, to Beijing, to Singapore, Malaysia, and Auckland, 04-31Jul2014

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I don't know how everyone else picks their vacations, but for me, almost all of my "fun time off" exceeding 4 days since 1992 has gone towards two goals: family; and neural network conferences. But it's never been the case before that these goals aligned geographically, as my two post-university daughters are usually at opposite ends of the planet, and the neural network conference jumps between North America, Europe, and Asia. In July 2014, the timing and locations lined up like some kind of astrological conjunction: the annual neural network conference took place in Beijing; my younger daughter, Sarah, and her partner Marcus, had recently moved from Lima Peru to Signapore; and most pressing (the imperative!), my first grandchild was born to my older daughter Catherine and her husband James in Auckland. My mother Irene joined me for the Singapore-Auckland legs of the trip, making for a great four-generation family trip. Health and insurance limitations constrained my father to staying behind in Calgary.

This "Travel Log" is not so much intended for a general public audience. After all, who really wants to read far too many details about someone else's vacation? It is, however, a collection of details, one or two of which might be of interest to others who have travelled to the same area. Beyond that, perhaps it is a lunatic's perspective of a perfect vacation, with the right destinations at the right time, and which magically touched on a number of concepts oand themes of interest to the author. And perhaps one or two of those themes may be of interest to a reader.

By the way, in this write-up I'll skip over the restaurant/food theme. I love eating, and to someone who cooks everything in the microwave (including steak boiled in water) that he doesn't eat straight out of a can, it's all great food!

Additionally, I've avoided spelling out full names in the narrative, to protect the innocent who have not given me permission to be dragged into this...

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Status as of ?date?:

- 02Sep2014 first draft, incomplete
- 26Sep2014 ready for review & corrections by family

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Singapore and Cameron Highlands, Malaysia, 13-20Jul2014

My younger daughter's partner works for 6 months to 2 years on hydroelectric projects located (so far) in Central and South America, and South-East Asia. Their "home town" is Olso, Norway, but they only return there for a few weeks several times a year, which means they have a lot of flexibility in how and where their travel paths wander. She is taking a screen-writing degree or something, but wouldn't discuss the techniques with her father (me), as I struggle to put together an historical documentary film (a crazy hunch on WWII). Smart kid - that way she doesn't have to delve into her father's dark subjects like war.



Map: Malaysia & Signapore, Google Maps

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Singapore warmth

Two wonderful initial days in Singapore included subway rides, restaurants, a great botanical park, and a day at Sentosa Island. I love ocean swimming, but the water was too warm to swim hard. Perhaps it was perfect for babies, who in any case like to warm the waters. I like colder water, although the polar bear dip in Vancouver last 01Jan2014 was a bit painful to the hands and feet when swimming out to the buoys and back (good thing the Coast Guard and kayaks were there, just in case). In any case, the beach bars and restaurants were a perfect place to sit an watch the sea, ships, and people.



Picture: Singapore Sentosa Island Merlion, http://www.sentosa.com.sg/en/attractions/imbiah-lookout/the-merlion/



Map: Singapore, Google Maps

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Kuala Lumpur during Ramadan

As my daughter's partner was leaving to Oslo on Friday night 18Jul2014, my younger daughter, mother, and I left the heat and humidity of Singapore to Kuala Lumpur, on our way to the cooler tea-growing Cameron Highlands of Malaysia. We stayed at the Frenz hotel in a neat part of Kuala Lumpur with markets along the streets, between the building and in the back allevs. It was the middle of the Islamic Ramadan month, a key holy period for the majority Muslim Malaysians. This is when I found out that the contrarian personal diet I dreamt up (eat supper only, no snacking, but I cheat) resembled the Ramadam prohibition of eating between sunrise and sunset (but they cheat too, at least according to my rules, as they eat a very early pre-dawn breakfast).



Map: Kuala Lumpur & Cameron Highlands, Google Maps

Cameron highlands - tea, and a reprieve from the heat & humidity

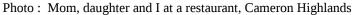
Early the next morning we bused to the Cameron Highlands, but I forgot my passport and a debit card in the hotel room safety deposit box. Hmmmm I wasn't worried at all, given my limited attention span and confidence in people (plus there wasn't much I could do about it while in the bus). The \sim 3 hour bus trip was beautiful, but I did wonder out loud how many tourist buses were lost over the side of the tight, hair-pin turns in the mountain roads, where buses and trucks had trouble passing one another. To that question my daughter replied that a bus trip she had taken in the Andes was quite well know for losing buses and tourists. At least we were far from the Andes. Strange thing though, it seemed that half to two thirds of the Caucasian tourists on the bus (and later in the hotel) were Dutch, with Germans and Australians making up chunks of the rest.

We arrived at the Capthorn Hotel in the Cameron Highlands in the late afternoon. The first thing I did was to go jogging along the highway. As the hotel was at the top of a hill, it was a steep downhill run, followed by a turn-around and uphill return. The Cameron Highlands are a lot cooler than Kuala Lumpur or Singapore, but it was still very warm for a strenuous run. Whether that contributed to messing up my previously-injured Achilles tendon, I don't know, but that was the beginning of the end

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of good, long jogs for my vacation period.







In what should have been a premonition, the next morning there weren't many Dutch people around - we had seen some arrive late the previous evening in good spirits, literally. More of that later...

We took a day-long bus trip to local highlights: a butterfly garden with other insects, spiders, snakes, scorpions (one perched on my arm while the guide held its stinger), lizards etc; a bee farm; the BOH "Sungai Palas Garden" tea plantation (www.boh.com.my), and the mossy forest at the top of Mount Gunung Brinchang. While some complain about tours, I really like them. The guides were superb and pointed out details I would never have known if I had gone around myself, and I thoroughly enjoyed the sites we visited - beautiful landscapes, industry, fascinating flora and fauna.

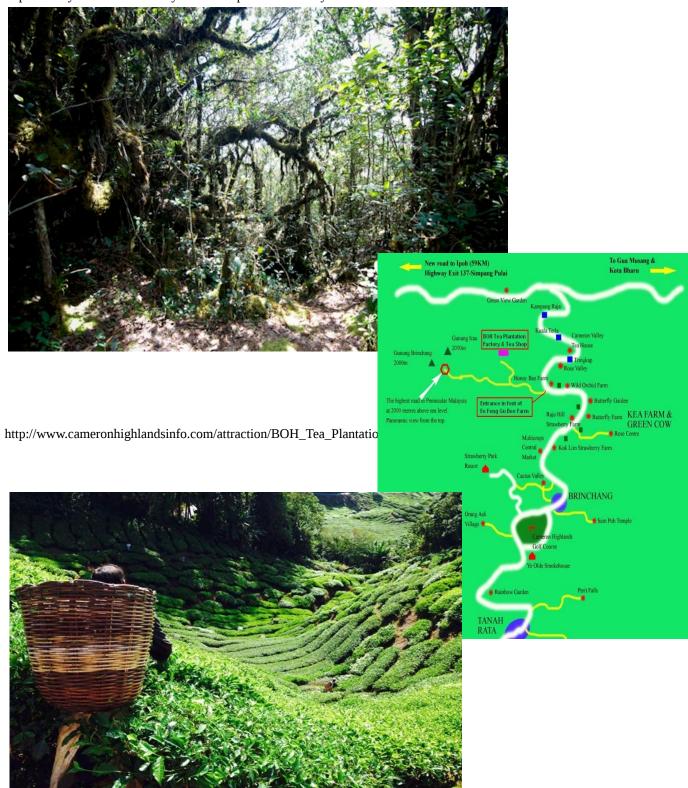
My daughter and I walked 8 km back from the top of the mountain (much easier than trying to hike up it!). After two days, we bused back Friday 18Jul2014 to Kuala Lumpur, this time staying at the Swiss Garden Hotel. After picking up my "lost" passport at the Frenz Hotel, followed by lunch in the "Reggae" Irish bar in Chinatown (much to my daughter's distress, but at least it had air conditioning, and my mother wasn't comfortable with many of the Chinese restaurants).



Map: Cameron Highlands, Google Maps

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http://www.yomadic.com/mossy-forest-tea-plantation-malaysia/



BOH tea Plantation, Photo by Sarah Howell

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Enchanted walk through Kuala Lumpur

I wanted to go for a long walk (my Achilles tendon saying no to a good run), and wandered zig-zag in the general direction of the Kuala Lumpur Tower and the Petronas towers. I came upon the Malaysian Forrestry head office and museum along the way, and having many colleagues in at NRCans Forrestry Sector in Ottawa, went through the small number of displays with some interest. Much to my delight, a local pointed out an inner city forrest behind the museum, so I walked through it on my short way to the KL Tower. Signs warned visitors to immediately vacate the forrest during rains, as four venemous species apparently come out on the footpaths when it rains (a snake, scorpion, spider, and centipede, if I remember correctly). I walked up to the KL Tower but didn't enter (I like to move around outside), and to my delight a large troop of perhaps 30 monkeys came out of the forrest, and crossed the road to the foot of the KL Tower, playing and tumbling on the hillside. I then walked to and through the Petronas Towers, which at one time I think were the world's tallest buildings (as opposed to communications towers like the CN tower in Toronto). I hate shopping, and even window shopping, so I only paused to buy a cold drink and ice cream cone. My path back to the hotel went through yet another large area of restaurants and bars.



Photo: Petronas Twin Towers Google images

> Photo : Kuala Lumpur Tower http://en.wikipedia.org/wiki/Kuala_Lumpur_Tower



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Strange echo of my current, dark history project

For supper, all three of us went back to the same market area that I had just came through, and it was at that time that my daughter told me of the Malaysian airlines airplane having been shot down the previous morning, 17Jul2014, when we had been on the bus tour. Her partner, Marcus, still back in Singapore, left that evening from Singapore-to-Amsterdam-to-Oslo, a flight that normally would have flown over the same area of the Ukrain, but which Singapore airlines had started detouring around a month earlier. My daughter didn't seem overly concerned, even though she too would take the same flight the next week. She stayed in Kuala Lumpur to audition for an acting part, or to cast actors for a play she had submitted to a Malaysian International theatre festival (one of 24 selected out of ~200 submissions). My mother and I thought we had a shoe-in to a famous acting career, but no such luck.

Goodbye to Singapore, Malaysia, and my money

Back to Singapore on Saturday, arriving in the late afternoon in time for a supper and film. I scrambled to catch up on emails and work Sunday morning, before taking an afternoon flight with my mother to Auckland via Sydney.

Several week later back home, I was to learn that one of my debit cards had been robbed of 600+ \$ in Malaysia (not the one in the safe-box in the hotel room, if I remember correctly). But that could have happened anywhere, and the Malaysians have enough problems with the bad luck that has hit their airline, and I'm sure they can use all the tourism they can get now. So don't be afraid of Malaysia if you are thinking of going there...

Auckland, New Zealand, 21-31Jul2014

My mother and I arrived in Auckland at noon, Monday 21Jul2014. We had been warned that it was in the middle of winter, and the weather wouldn't be very good. Funny thing though, it was cool and beautiful - the same temperature as the rather cool summer day back home in Alberta when we left. Frankly, the weather for our whole stay was just the way I like it - cool, often sunny, and fresh. My daughter Catherine picked us up at the airport and drove entirely across the greater Auckland area to Springbank, on the East cost ~20 or 30 kilometers North of Auckland. The roadways in New Zealand tend to be hilly, narrow and extremely winding, and everybody drives on the wrong side of the road, so you have to be careful.

Our arrival at James & Catherine's house came one day before the departure of two young visitors, Robyn Mo-Lian and Jasmine Leese, who were finishing the New Zealand leg of a three month or so long summer vacation in South-East Asia, Australia and New Zealand. Robyn is the daughter of a best friend in Ottawa, Dom, an avid tennis player (one-time champion of Malaysia!), and of the Hash House Harriers "drinking club with a running problem". We had dinner at a restaurant with them, and saw them off the next morning.

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Catherine Howell's Facebook: Robyn & Carter

James at home on his tractor, Family photo

James & Catherine's abode

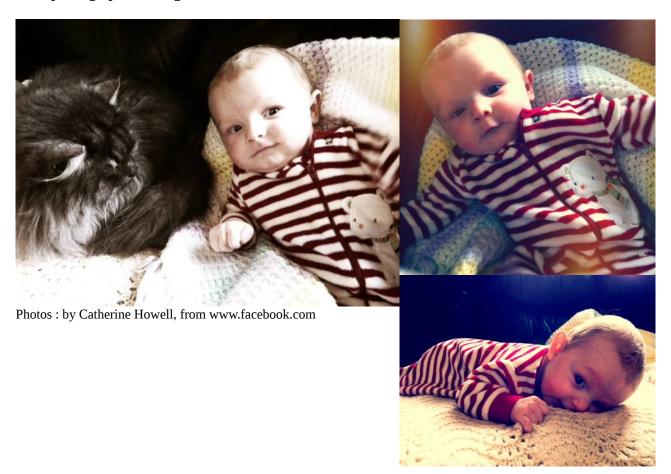
She and husband James have 40 acreas on a hillside bordering on an estuary (kayak to the open sea at high tide, wallow in mud at low tide). Other than their on-property roads, a huge (farm-sized) hanger-like garage, and their small, cabin-like but charming, house, the entire lot is like a jungle, with palm trees and a pile of other towering deciduous trees, and very dense underbrush. The neighbors to one side have sheep, so their hillside is cleared off and grassy.

Across the small estuary (like a streamlet) is Springbank on a hillside, and just past the community and around a corner is the boat clubhouse, and boats at anchor. (Yes, there is beer available in the clubhouse, and yes, I did sample some). James and Catherine have no connection to the electrical grid, and given the cost of doing so, James opted to go solar photovoltaic with a diesel genset backup, 11 kW (output power rating) of lithium-ion batteries, and an advanced (expensive) power controller. To heat the house, they chop wood from their own property. In theory, harvesting one tree a year will do it, which is way lower than the overall grow rate of timber on their property, so James distributes a modest amount of chopped (I should say hydraulically-split) wood to friends and the boathouse club. If a forest fire ever started on their property, it could be a big one.

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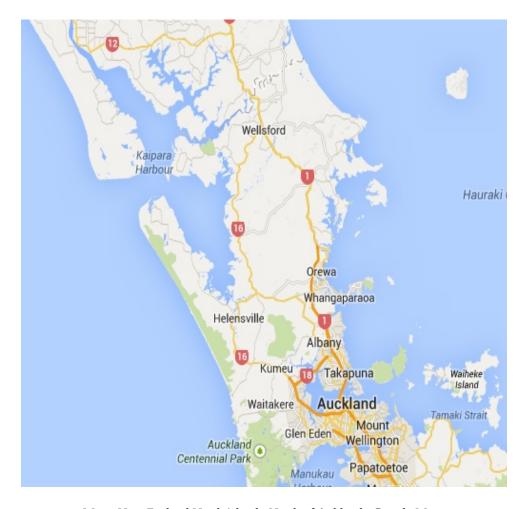
Grandson Carter

As I mentioned earlier, the grand highlight of the trip was meeting my first grandchild, Carter, who was 3 and a half months old at that time. He's a pretty happy guy, smiling most of the time, crying when he isn't, and generally spending his time eating, sleeping, dirtying his diapers, and ordering his parents around. His accomplices are Olive, a large female boxer dog, and Marley the cat. Part of his bedding was a knitted ?wool? blanket made by my "Sundowner" friends in Hussar Alberta. But even though (or perhaps because) Carter doesn't have much to say other than laughing and crying, he travels extremely well, putting up with long hours in the car en route to where-ever.



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Auckland area, 22-24Jul2014



Map: New Zealand North island, North of Aukland, Google Maps

Chef's delight, killer beach, and museum

Over the next three days we did a number of activities with my daughter and son in law, including luches at a beach north of Auckland, a seafood cooking evening with an Aukland TV chef (that was a great deal of fun, and VERY tasty!), two visits to the Auckland museum of [Maori, Natural, War] history, helping my son-in-law with burying electric cables for his solar-powered system in trenches, and a trip to Piha beach - New Zealand's most notorius for drownings. I had planned on swimming at the beach, which is nexted in a small cove rings by high, steep hills around it. The view is spectacular, but one look at the beach area, and the violent battle between the high winds and strong ocean currents was enough to put aside any idea of swimming unless I could find a knowledgable local who knew how to stay floating and alive in that environment. (no such local showed up...)

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Auckland War Memorial Museum

I visited the museum twice, as neither friends nor family have patience with my slow reading through exhibits. The first time was an hour or two with my daughter and mother, who completed the entire museum tour in the time I took to go through only one-sixth of it. The second time I spent the entire day, getting through the two areas of immediate interest because of several projects I have ongoing: the Maori section on the first floor of the museum, and the War history on the third floor. I've always liked Natural History too, and New Zealand has some awesome wildlife, but you can't do everything.



Photo : Auckland War Memorial Museum Google Images

Maori history, navigation, symbols

When he could still paint, my father focussed largely, albeit not exclusively, on BC coastal and Alberta plains aboriginals (see http://www.billhowell.ca/Neil%20Howell/Neil%20Howell.html), and I have also become interested in aboriginals as part of a larger interest in history. This was my first chance to see first-hand the artifacts and extensive and high-quality museum display on Maori. The stories and art built into their lodges, clothing and weapons was well laid out and explained in the museum. One gets a very vivid view of how tough an opponent they presented to the invading British, how brutal and uncertain the battles were. Shark's teeth swords, heavy clubs, and the short, stubby hardwood clubs, complimented the intimidating Maori war dances and cries. Traditionally, the Maori focussed mostly on maiming, rather than killing, enemies, as a killing was to be repaid by either another killing or land (not to say that death and atrocities were unknown!) This is somewhat similar to the "counting coups" of North American native people - a sign of a brave warrior who would tap the enemy on the head rather than kill them. Why didn't the Maori have bows and arrows? What about hieroglyphs and symbols as a basis for a early written language? They supposedly came from South-East Asia, although some archeologists see a strong resemblance to South American cultural artifacts (Thor Heyderdales? Kon-Tiki expedition was an attmpt to show the plausibility of Suth American origins).

Going into the display, I had a particular interest in two themes: Polynesian / Maori sea navigation; and any signs that I could surmise that there may have been very special astronomical orgins of their [petroglyphs, carvings, symbols], as related to a very peculiar theory of petroglyphs that has ignited a narrow interest I now have in mythology. But, as with Canadian petroglyphs that I have looked at,

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there were no convincing signs of the petroglyph theory, which seems to be limited mostly to petroglyphs prior to 1500 BC, but which is a feature of petroglyphs from around the world, including those of Australian aboriginals.

I saw nothing in the museum to suggest that ancient Polynesian / Maori navigators had a means to determine longitude, which is usually credited to the invention of reliable mechanical, sea-worthy clocks. Still, trying to find islands in the Pacific would be like finding needles in a haystack, and I still wonder whether the "random walk" modeern assumption of Polynesian navigation tells the full story. At present, I suspect that sufficiently accurate long-term records of solar/ planetary positions WOULD be an adequate basis for longitude determination, but I won't get the chance to check into that until and unless I complete many other projects. Based on my simple museum visit, the Maori / Polynesians did NOT seem to have extensive and accurate multi-decadal records of planetary positions, as was the case for the ancient Egyptians, Babylonians, Chinese, Mayans, Inca, etc. However, strangely, a possible clue came from my son-in-law James, a merchant sea captain for service vessel for offshore oil plaforms. He later commented that Captain James Cook had problems with "longitudinal drift" after sailing around New Zealand, so he had to stop and make astronomical corrections to his ship's clocks. That is strange, and may not support abolute astronomical determinations of longitude as relative corrections my have been sufficient. But maybe there is something there...

First Swim for Carter, Family dinner

On Friday 25Jul2014, baby Carter had his first swimming lesson at 3.5 months age. He seemed to enjoy it but got cold quickly. James said that because New Zealanders are never far from water, they all learn to swim well at an early age. This can pose a problem for children who come from overseas, who often don't have the same swimming background, as they can easily get into trouble following their NZ friends.

That night we had dinner with our in-Laws (three generations on their side) at a nice Restaurant where we celebrated two birthdays (my Mother's and I forget whose else's). The ribs were fantastic. So was the quantity, and so was the company!

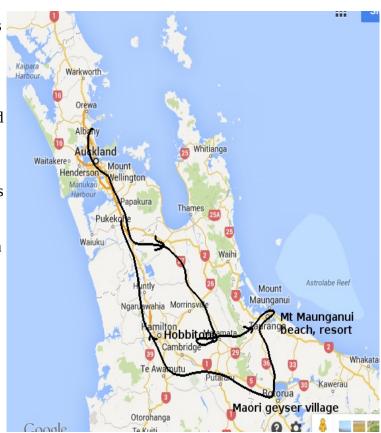
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Mid-North Island tour, 26-29Jul2014

On Saturday 26Jul2014 Carter, Catherine, James, mother and I left by on a 4 day vacation-within-a-vacation to a long-term favourite vacation spot of Jame's family - Mount Maunagui, which is on the harbour of ?place? NZ. As previously mentioned, Carter travelled exceptionally well, and was fun to have along (that doesn't mean that I did any diaper changing, not that the mother woulld have trusted her father). Outside of Auckland, many of the highways were surprisingly narrow, winding, and

shoulderless. The land was lush green in the middle of their winter, the temperatures very agreeably cool (for me, maybe not so much for the New Zealanders), and the most part the countryside was hilly. We did go through a broad, flat farming plains area perhaps 20 to 30 km across. It seemed strangely hemmed in by the hills and mountains, compared to the open, endless Canadian prairies where I live. At times, farmhouses were surrounded by continuous 20 to 30 foot high cedar or evergreen trees of some sort, which were extremely well trimmed and aligned. That must have been a huge amout on upkeep, when I think of the several species of bushes around my village lot.

New Zealand drivers are very courteous and safe.



Map: New Zealand North island, vacation area, Google Maps

Land of Hobbits

On Saturday, we stopped at Hobbiton, the film location for the village of Hobbits in the films "Lord of the Rings" and "The Hobbit". Although not a fanatic, I am a big fan of those books. Even if I was happy to go, I enjoyed it far more than I ever expected. It's just insane the extremes to which the director went in the details, even creating a synthetic tree for which the leaves were individually mounted on fake branches. The leaves were subsequently hand-painted by university students, and the moss on the rustic wooden fences was also synthetic. So not only are the books a fantasy, so are the film sets. It's unbelievable.

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Photo : The Green Dragon™ Inn is a replica of the inn that featured in the Lord of the Rings and The Hobbit trilogies.

http://www.hobbitontours.com/

One of the world's best bars that I've visited was on site, with admission restricted to those on the site tour, and the time limited to only a 3-beer stay, drinking quickly. Apparently this is a popular site for weddings, and it's not hard to imagine why.

Mount Maunganui

We arrived for a two-night stay at Mount Maunganui by 16:35 on Saturday, unpacked, then walked a few short blocks to the popular restaurant-bar strip nearby. Being so close to the sea, mother and I had fish & chips. We returned to the hotel room briefly, before James and I headed back for the bars.



Photo: The town as viewed from The Mount http://en.wikipedia.org/wiki/Mount_Maunganui

With sundown the temperature plummeted from fresh to cool bordering on cold, but still nice-to-

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bearable in a simple shirt. What made it feel much colder was to watch the New Zealanders strolling around in winter coats. I did my best to sample some local brews, and we engaged with the locals in intense discussions on unimportant and forgettable subjects.

The next morning was my chance to go to the beach a block away from the "Atlas Suites" model/condo where we stayed. Following a quick coffee, I took the first of 2 swims at the kilometer-long beach. The ocean was cold, but great for swimming, other than it was difficult to keep my head in the water for more than 30 seconds or so of doing the crawl, as the eyes began to hurt. After half an hour in the water continuously, I got out and dried in the sun and slight breeze, with some after-shivers as I warmed, but feeling great. New Zealanders are far too spoiled - apparently they wait for summer to do their swimming, and as a result I had the entire beach all to myself for all of my swims. Talk about feeling rich - my own private ocean.



Photo: Panorama of Mount Maunganui and the Main Beach, http://en.wikipedia.org/wiki/Mount Maunganui

I spent the afternoon working on meeting minutes, followed by fish supper in the hotel and a movie on TV.

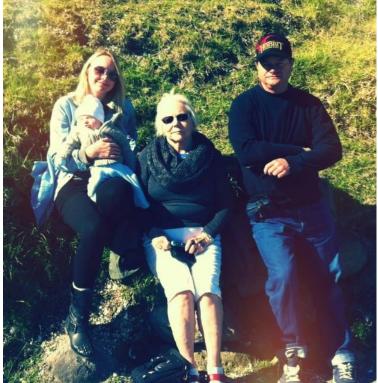


Photo: Four generations at the foot of Mount Maunganui, www.facebook.com

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On Monday 28Jul2014, after coffee and another swim for me, we all walked the ~5 km path around Mount Maunganui, while sites at the entrance to the harbour. It was a sunny, bright, and low-wind day, perfect for a stroll. A seal swam about doing what seals do among the rocks on the ocean-facing side of the mountain, with waves splashing in. This would have been a great place for snorkeling.

Whakarewarewa - Maori village and geothermal site

We left Monday around noon hour, on a 1.5 hour drive to Hells Gate, where we were supposed to go to a geyser-heated mud-bath. However, someone pointed out that the mud was dirty (?huh, did I miss something here?), so we headed straight on to the Whakarewarewa Maori village situated amongs geysers not far from the edge of a volcanic lake (?or metor, or electric discharge? - again, shades of some alternative concepts that I am interested in (right or wrong), this time liking astronomy and geology).

This was a fascinating tour led by an energetic Maori woman with long ancestry in the village. Geysers and hot water are everywhere - even to the point of having caused abandonment of one of the homes when a new geyser emerged beneath the kitchen floor. Traditionally, Maori only had to lower food for a short period of time into the sulfur-smelling water to have their food cooked quickly (the deeper the food was lowered into the water, the higher the temperature and the faster the cooking!).

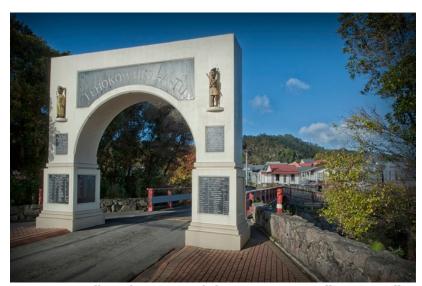


Photo: Entrance to village, http://www.whakarewarewa.com/Gallery/Our+Village.html

Four Maori dancers performed at the end of the tour. Even though they continually perform, their energy, warmth and enthusiasm was impressive!

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Photo : Maori Cultural performance (at least 3 dancers in photo were at the performance we saw) http://www.whakarewarewa.com/

At 16:00, we piled into the car again, and made it back to James&Catherines (& Carters!) by 20:21 Monday evening.

Auckland city, 29-31Jul2014

The remainder of my time in New Zealand consisted of driving to Auckland (on the wrong side of the road, and trying to keep it that way) during the day, visiting a sister-in-law in Albany at the Northern end of Greater Auckland (not far from James & Cahterine), and helping son-in-law James with work (and beer) on his lot in the evening.

My first use of car GPS

The extra car my son-in-law keeps on hand is equipped with GPS, something I've never bothered to purchase in spite of driving in New York, and major cities across Canada. I guess that puts me among the technological Neanderthals. It's a wonderful tool and very handy and fun, but I only used it the first day, and once when twisted around in downtown Auckland. I did have a paper map, but frankly, I find that neither map nor GPS are all that critical once you've driven through town once. What struck me is that GPS has an overall huge safety benefit for a stranger - that is the "anticipation and planning" that it allows on the fly, as opposed to stopping to take another look at the map, or driving around by dead-reconning in a strange place like New York. On the other hand, I like to keep my eyes on the road, and once or twice was distracted by the GPS. While I can't see a critical need for it in areas familiar to me like Southern Alberta, Ottawa, Toronto, and Montreal, it would still be handy. Where it's really worth gold is for huge, unfamiliar cities when you're late for getting back to the airport. That happened to me years ago when scrambling through NYC to get to La Guardia, but frankly, even in that case dead reconning worked fine (but that wasn't a sure thing at all!).

Auckland University of Technology (AUT)

While my main objective at AUT was to meet a friend Nik, who is a director and professor there in the area of neural networks (more of that subject in the Beijing leg of my vacation below), it is worth

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mentioning the university as it is in downtown Auckland, and is a very interesting area to drive and walk through. The old streets are extremely narrow, and I was glad that I wasn't driving my big van - parking would have been an absolute nightmare. Yes, big trucks drive through and park in the streets, but they know what the laws, customs and risks are. There is no way my van could have turned corners in the multi-story parking lot, let alone fit under any beam.

The buildings are necessarily better insulated than Nanyang Technological University in Singapore (which I did visit, but missed my professor friend there by several minutes), but aren't braced for icy winters like I am used to. I was surprised to see that so many students don't bring laptops to uni instead they use desktop computers in large areas provided by the university. I guess that saves lugging a lot of weight around, and probabbly saves many students the expense of a computer, but more importantly the problems of maintaining their own computers (perhaps the young generation isn't always as computer-literate in some ways that one might expect).

I was given a tour of Nik's research group, and participated in one of their weekly meetings, where the subject of visualisation of learning and evolution by their Spiking Neural Network (NeuCube) was discussed. After that, I had to return to James&Catherine's to prepare to fly out.

Return flight to Calgary

All good things come to an end, and so Thursday afternoon, after returning from AUT, my mother and I scrambled to finish packing and get to the airport, way on the other side of Auckland (driven by Catherine). It's always nice returning home after a long trip, but not quite so nice spending 12 hours on a single flight to Vancouver. Non-stop movies and a bit of conversation made it a bit easier. I sleep extremely well in planes, cars and trains, but only felt like sleeping for a couple of hours on that flight.

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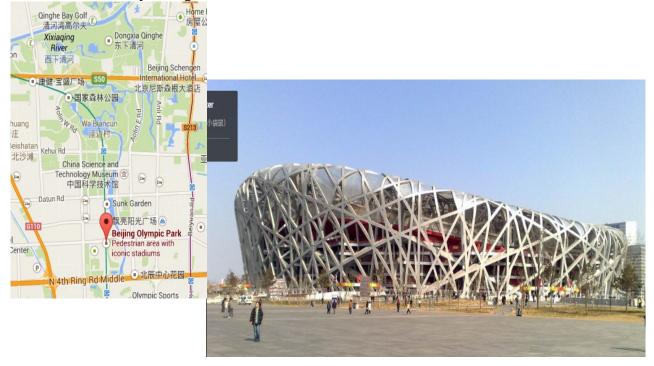
WCCI Banner

Beijing, China, http://www.ieee-wcci2014.org/ 05-12Jul2014

I've left the first leg of my vacation for last, as I assume that few people want to be dragged through the subject of Computational Intelligence, with a main emphasis on neural networks and a secondary emphasis on Evolutionary Computation. Loosely stated, Artificial Neural Networks (ANNs) are an approach for trying to understand how biological neurons/brains function on the one hand, and how to apply their power to very difficult (and at times otherwise impossible) engineering and science challenges on the other hand.

Perhaps a more familiar way to put it is that Terminator (Arnold Schwarzeneggar) was based on a NN chip, as have been several other sci-fi movies. Already NNs have been painted as "bad guys".

But this has been my priority hobby interest since 1988, and I've tried to attend the annual [WCCI, IJCNN] conferences when I could afford it ever since the 1992 Baltimore conference. This has always been based on after-tax, out-of-pocket money, as these subjects has never been a focus or skills basis at the research labs in [industry, government] where I've worked. I come more from the engineering side, but I have a greater interest in the [biology, neuroscience, psychology, sociology] side, even if that's not where the bulk of my time goes.



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Touring in Beijing

This section is going to be very short, as I did the same tourist activities in Beijing that I always do no matter where the conferences have been (eg Portland, Budapest, Hong Kong, Dallas, Houston, Portland OR, Washington DC, Honolulu etc) - basically nothing other than go jogging a few times, go to a restaurant with colleagues, go swimming if there is an ocean, and possbily take a bus tour of the area (only in Honolulu did I do the latter two). The rest of the time I stay at the conference site. The way I see it, "... the purist form of art, beauty, and sheer fun, is mathematics …", so why lose my precious time on other junk (especially when it costs so much!).

But my jogging is worth mentioning - the conference hotel was right across from the Olympic grounds ("bird's nest" stadium), and just down the broad pedestrian causeway ~2 km is the "Olypic Forest", which I call the "Enchanted Forest", as it is so beautiful. This was a tough run of ~15 km for someone like me who is not in shape, and who is not used to the heat and humidity. In case you are wondering - the supposedly horrible Beijing pollution was definitely NOT bad and did NOT affect me the days I was there, even though I am lightly sensitive to a very high [pollution, heat, humidity] combination when running distances in Canadian cities.



Photo: Howell and Antonio Beijing Olympic Forest (He's in shape, I'm dying, fog-smog of Beijing in the background)

Many other conference attendees did go to the Great Wall, Forbidden City, Tiammen Square, etc, etc. There are many, many things that I would like to see - but only if I ever take a vacation just for that (fat chance - first dibs for travel money are family and NN conferences).

Some themes of possible general interest

Ray Kurzweil's "Singularity"

Doubtless many others have presented the concept long before Ray Kurzweil, but I think that he is the one that coined the term, and has been hyping the oncoming "tipping point" (to use Malcolm Gladwell's over-hyped term of ancient origins), when machine intelligence exceeds human intelligence.

One of the quotes of the conference came from Don Wunsch of Missouri S&T University, who said:

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"... If you've come to this conference to learn how machines are going to exceed human intelligence in our lifetimes, then I suggest that you have come to the wrong conference. You should be attending a conference that is dealing with the extension of human lifetimes, because this isn't going to happen in our normal human lifespan. ..."

My own opinion for some time is that this will take 300 years or so (hedged by the potential for hyper-evolution of concepts from the Evolutionary Computation area, but still...). Some others have somewhat-similar expectations (Robert Hecht-Nielson had said 200 years, others about the same).

I was thinking about this after the conference. When combined with thoughts about the "Deep Learning" excitement that has recently skyrocketed (see below), it struck me that excitement-hype cycles in the neural networks research area seem to have been manifested since the early days in ~1943. Perhaps my impression is purely based on forcing an interpretation on the data, but it does seem to me that major hype points have repeated more-or-less every 22 years, which just happens to be the full sunspot cycle (11 years is the half-sunspot-cycle): McCulloch-Pitts (~1943), Rosenblatt (mid-1960's), John Hopfield (1984) plus 3 groups independently re-deriving simple forms of backpropagation (1986), and Geoffrey Hinton / Yann LeCunn's Deep Learning (~2008, but really taking off in 2012). Cynically, I would say that one "... has to wait for the old scientists and mathematicians (and funding agencies and policy wonks) to die ..." before breakthroughs can be accepted, but in any case this kind of perspective helps to force more thinking about how many steps we know we have to go, then all of the steps that we don't know we have to go, and how long (22 years) it often takes for each step. Note that the dates above do NOT reflect when ideas were invented, nor by whom. It is often unrecognized scientists come up with the big concepts long, long before others are given the credit for it. Perhaps as machines develop, they too will be subject to the same "... waiting for the old (machine) dogs to die ...". <grin>

Approximate Dynamic Programming & [Optimal, Adaptive, possibly real-time] control theory

Advanced control theory is closer to my own reading and reviews in the neural network field, and as I already wrote many comments following last years conference in Dallas (see http://www.billhowell.ca/Neural%20nets/Howell%20131013%20Robots,%20Signal%20Processing%20and%20Control%20Theory%20-%20Random,%20stray%20thoughts.pdf), I won't go much more into that, other than saying the possibility of real-time learning [Adaptive and Optimal] controls for at least simpler complex systems (oxymoron) seems to be starting. Also important is that the success of Approximate Dynamic Programming based on adaptive critics seems to be gaining more momentum in many other fields.

Deep Learning

I won't go into detail on this subject, even though it is critical to me. I will just say that work by Jeurgen Schmidhuber (Switzerland), Geoffrey Hinton (Uof Toronto), Yann LeCunn (NY university), and many others has produced astounding results over the last 6 years, and more particularly in the last two. Furthermore, thinking (such as that described by Schmidhuber, some of which is linked to ADP of the previous section) has the potential for driving this much, much further. In areas like machine vision (image recognition), voice recognition, and others, Deep Learning has blown away many competiting

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approaches in the last two years especially. Google and Facebook are apparently working hard on this!

Big Data

This is a strange theme in a sense, because "Big Data" has always been a challenge and a theme. But the important point is that there is an explosion of data in areas like [genomics, proteomics, neuroinformatics, astronomy, geology, etc], and there is an explosion of the dimensionality and complexity of the data. Furthermore, machine learning techniques have some potential for doing analysis of the data to help further effort by both scientists and machines.

In any case, there is a lot of R&D funding expected for this area, with huge interest by players like Google, Facebook, NASA etc, and funding can light the fires of enthusiasm.

There is currently an effort underway to launch a neural network-centric Big Data effort by scientists in that area. The feeling is that many of the key challenges of Big Data described above, have been dealth with by neural networks for a very long time, and that NNs may be one of several key concepts that can really contribute to addressing the Big Data challenge.

David Fogel - [Kasparov versus Deep Blue], Blondie24

I did run briefly into David Fogel one morning of the conference. His 2001 book "Blondie24: Playing at the edge of AI" tells of a checkers-playing system he and a colleague built. It consisted of a surprisingly small (34 neurons if I recall correctly) NN double-wrapped with Evolutionary Computation (genetic algorithms in this case), which learned to become an expert (but not grand-master) level checkers player, given only the simple mini-max theory (a key concept in game theory), the legal moves of checkers, and the start and end games (which are amenable to strictly computable results). At the WCCI 2002 Honolulu conference, for which he was general chair, the book purchase went something like many of the books I end up buying:

David "Hey Bill, did you buy my new book?"

Bill "I didn't know you had published a new book." (Stupid statement on my part - David has written several good books)

David "Yes - It's over there on that table."

Bill "I was just at that table and didn't see anything."

David "It's right there, it's the small, dark-covered paperback"

I'm really glad he sold it to me - it's a fantastic book with great lessons! That is also my experience with many other authors whom I have met at the conferences.

The book clearly states that their project was inspired by David's outrage, apparently common in the Computational Intelligence (CI) field, that the press had portrayed IBM's chess-playing computer, Deep Blue, which beat the top human chess player Gary Kasparov in 1997, as the pinnacle of computer intelligence, whereas the CI field felt it was simply encapsulated human expertise that failed demonstrated profound machine learning.

But a strange irony I was only to learn a couple of years ago from the film directed by Vikram Jayanti "Game Over: Kasparov and the Machine", Kasparov did not believe that Deep Blue's moves in the egocrushing second game were made by the machine, which had not shown that kind of "thinking" in the

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first, or even subsequent games. Kasparov suspected that a committee of grandmasters had intervened for the critical moves. This "spontaneous, exceptional ability" also is described by David Fogel for Blondie24's entrapment of a human checkers player, an almost-chilling or spooky effect.

I asked David if he had written a third sequel to his series "Burden of Proof", dealing with far-from-solid overwhelming consensus science opinions based on very shaky grounds. He had not, but might consider that in the future. Beyond the area of CI, that is my priority theme - the catastrophic failure of [rational, logical, scientific] thinking, and problematic behaviours, that occurs with the overwhelming scientific consensus in many, if not most, areas of science. (WARNING - this isn't David's theme! He doesn't go this far!) This isn't about new data and superior analysis replacing the old, as usually described. It's more about "science fashions become science cults, become science religions", and the persecutions of dissidents within the community. Based on work related to this general theme on scientific thinking, it my impression that there is a very good possibility of enormous scientific, and more importantly "post-scientific" revolutions overthrowing the very basis of current scientific thinking, at least in the areas of [fundamental theoretical physics, astronomy, geology, climate, history] that I have followed most. Very exciting times may lie ahead.

Icebreaker and the Russians

As a last theme, I'll mention yet another weird timing related to the "Strange echo of my current, dark history project" comments under the Singapore leg of my vacation above. Because of my current work on an historical documentary film that analyses a lunatic re-interpretation of World War II, I was very interested in the opinions of two extremely bright Russian friends at the conference. I had a chance to sit with Leonid for a few minutes - too many minutes, in fact, as he was late as session chair and first paper presenter because we talked too long! While Crimea and the Ukrain are not dominant themes I will touch on in the film, they are very much core to the overall process (including the Ukrainian Holomodore of 1931 to 1934). I won't delve into details here, but the result was that Leonid had never heard of such an interpretation, but strangely (as everyone has) didn't immedately and irrevocably reject it either.

But I'm very glad that I asked the question before the Malaysian airline plane was shot down over the Ukraine. At least I won't be seen as reacting to that incident in my questions.

enddoc