Auckland Anniversary Day, Monday, 26 January 206011

Dawn

After the vicious cyclone¹² overnight, dawn breaks gently to the ebullient calls of the birds. The light spreads rapidly across the huge city and its beautiful hinterland of bush and beach. Any of the volcanic cones offers a good view of this sweeping panorama across our thriving Auckland region. Mount Hobson, though – close to the historic heart of the city where water and land, our two abundant sources of wealth, meet – has a special place in the region's story.

Today is Auckland's Anniversary Day. And Mount Hobson is named after the man who decreed it an annual holiday for the Auckland Province. That was 218 years ago. ¹³ But if Hobson were standing up on this namesake cone this morning, he would still readily recognise this wide vista across the Waitemata Harbour and to the scattering of islands beyond.

If his eyes were sharp, he'd spot small boats drifting in the lee of Rangitoto. If he thought those people were fishing, he'd be right. Over the years, we've learnt lots about restoring the ecosystem of our Hauraki Gulf Marine Park.¹⁴

But he'd be puzzled if he looked down below Mount Hobson. When Ngāti Whātua, the first settlers here, offered him the pick of the harbour's land to build a new city, he chose a graceful string of little hills and bays at the foot of this volcano.¹⁵

Now, a flat, angular shoreline reaches out into the harbour. Landfill a century or more ago formed the extra land to accommodate a booming city. It remains today home to many people, businesses, and recreational activities. In recent decades, though, we've made it one of the most admired waterfronts in the world.

¹¹ http://www.timeanddate.com/calendar/index.html?year=2060&country=30

¹² NIWA report for MfE, op. cit., page 32.

¹³ http://en.wikipedia.org/wiki/Auckland_Anniversary_Day

http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=D98E5EE9-2798-40B5-B8EC-9AC2FB3B271A&chapter=3

¹⁵ http://www.ngatiwhatuaorakei.com/History.htm

Last night's storm, though, had the emergency services out. As expected, climate change has brought a 40-cm rise in sea level in the past 50 years. And weather events are more extreme and frequent. The good news is temperatures are only a couple of degrees higher.¹⁶

We've built well to adapt but we always worry about storm surges. And we worry a lot about the unexpected. Just a month ago, severe earth tremors along the Kerepehi Fault¹⁷ – under the Hauraki Plain and into the Firth of Thames – caused a series of small tsunamis. They did a lot of damage both sides – Seabird Coast and the Coromandel – and up to the eastern beaches of Waiheke.¹⁸

Despite the severity of last night's cyclone, the waterfront has suffered no damage. We live well with the sea. And so we should. We're Oceanic People. That's how we see ourselves these days. 19 All our ancestors, Māori, Pākehā, Pacific peoples, Asians, Africans – indeed, members of almost every major ethnic group on the planet 20 – travelled from afar to build this nation, this city, and to create our distinctive, multi-stranded culture. 21

Yet, for the first century-and-a-half after Hobson, we poured our energy and ambitions into the land. While we enjoyed our coastal waters, the vast oceans still separated us from the rest of the world. Even in the early decades of air travel and instant global communications, we still struggled to make a living, play a role in the wider world.

Our fortunes reached their lowest ebb late in the past century and early this. Dependent on commodity exports, we were short of money and ambition.²² We invested in only incremental change. We tried to build this nation and city in a piecemeal way that always lagged, never led the great forces reshaping global society.

It took the first great oil and food shocks to make the citizens of the world realise how radically we all needed to change. In the decades since, we and the rest of the world have achieved by far the most profound and fastest transformation of technology, environmental practices, economic models, and governance structures humankind has ever attempted.

Here in New Zealand, we earn most of our income, as we always have, in ways that depend on our natural environment. But it is a far bigger, more sustainable living, thanks to our advances in the science and management skills we apply to our natural resources.²³

We've seized many of the opportunities presented by this century's global turmoil. Three international conferences this week here in Auckland will reflect on the lessons we've

- 16 NIWA for MfE, op. cit., page 32.
- 17 ARC, State of the Auckland Region Report 2004, page 82.
- 18 http://www.gns.cri.nz/research/gmap/citymap/eqhaz.html
- 19 Landcare Research, Four Future Scenarios for New Zealand, Edition 2, 2007, page 40.
- 20 Statistics New Zealand, 2006 Census, regional summary tables. http://www.stats.govt.nz/census/2006-census-data/regional-summary-tables.htm
- The Office of Ethnic Affairs, Community Directory by ethnic group. http://www.ethnicaffairs.govt.nz/oeawebsite.nsf/wpg_URL/Community-Directory-By-Ethnic-Group-Index?OpenDocument&cat=--%20 Show%20All%20--
- Multiple sources e.g. New Zealand Institute, *No Country is an Island*, November 2005, page 6, and the institute's subsequent reports.
- 23 Landcare Research, Four Future Scenarios, op. cit., pages 39-52.

learnt with our most important successes. We have become world leaders in all three sets of skills. People look to us for leadership on how to rise to the endless challenges ahead.

The first will focus on the future of our global lacto-pharmaceutical industry, led by our dairy sector as it moved from commodities into very high value, sophisticated products. It was a long, hard journey. It took thoughtful public debate and good governance to get Aucklanders used to the idea of having such high-technology labs and factories in their neighbourhoods. And to get them behind winning these investments against stiff competition from many other international cities.

The second conference is about the unique model of mini-multinational businesses we have pioneered. These small, highly entrepreneurial companies are successful in global markets. They are adept at investing in research, manufacturing, and sales in key markets around the world. But they have a nimble, collaborative style born of their New Zealand culture and ingenuity.

We've proved it's possible for small companies from small economies to thrive globally. So for many decades now, we've been showing other people how to adapt the model to their own cultures and economies. The leader in this, the UN's centre for developing minimultinationals, is based here in Auckland and is hosting the conference.

The third event is a summit on our seabed sciences and management of the ocean commons.²⁴ Our voyage began in 2006 when New Zealand submitted to the UN Commission on the Limits of the Continental Shelf the outline of our claim to a 200-nautical-mile Exclusive Economic Zone.²⁵

When our claim was eventually granted, we became responsible for an oceanic area nine times greater than our land mass, some 4 million square kilometres, thanks to our craggy coastline and many distant small islands. By comparison, Australia's EEZ is only twice ours because of its simpler coastline. Our EEZ brings us great wealth from fisheries and minerals. But it also presents big demands in terms of protection and careful management of its intensely complex ecosystems.

News overnight of another shipload of eco-refugees²⁶ from the Pacific Islands beaching on Great Barrier Island will only inflame debate. We're sharply divided on how many refugees we can settle and where we should build the next series of naval and air bases we need to help us protect our zone.

Motu Economic and Public Policy Research, New Zealand's Quota Management System: A History of the First 20 Years, April 2007.

²⁵ http://www.mfat.govt.nz/Treaties-and-International-Law/O4-Law-of-the-Sea-and-Fisheries/NZ-Continental-Shelf-and-Maritime-Boundaries.php

Statistics New Zealand, Environmental Scanning: Looking into the Future for Statistics New Zealand 2006-2050, page 21.

One of the mooted air base sites is up north at Bream Bay, between the Brynderwyn Hills and Whangarei. And the naval base could be part of the NorthPort²⁷ expansion at Marsden Point, a bit further up the coast.

These days Whangarei is only 50 minutes by train from Britomart. And that's with a couple of stops on the North Shore. The network and its interconnecting motorway system have been a big help with urban development. They've quite changed how and where we live. In addition to the route down from the north, a second line runs east to Tauranga and Whakatane and a third runs south through Hamilton, Rotorua, and Taupo and on down to Wellington.

This road and rail system has allowed us to develop our towns, old ones and some new ones, into beautiful, compact, eco-urban areas, each close to bush and beach. All up, 3.4 million of us live in this "string of pearls" as we call them.²⁸ About 2.2 million²⁹ here in greater Auckland and 1.2 million from Whangarei around to Whakatane and down to Taupo.³⁰

Another 850,000 live elsewhere in the North Island and 1.35 million in the South Island making 5.6 million for the nation.³¹ That's a big change from the start of the new millennium when the Auckland region was only just over 1 million and the country 4 million.

The region's urban area had grown very fast after the Second World War. But the density was very low, lower even than Los Angeles.³² Everybody wanted their quarter acre. Nobody was keen to pay for the infrastructure so we always ended up expensively retrofitting it piecemeal long after we needed it.

What changed things? A whole bunch of things, really. Frustration with delays and failures, a strong sense we weren't on top of our economic and social problems. Those were two big ones. But it was the energy and economic shocks some 50 years ago that finally brought people together. We realised we had to rethink how we lived, worked, and governed ourselves. These were issues everybody the world over was wrestling with, and still are.

A growing population over the past 50 years gave plenty of scope for reshaping the urban landscape. We've doubled the number of homes in Auckland and we've replaced about a quarter of the old, badly built ones.³³ New building materials have helped, particularly the

- 27 Container ships are getting larger, needing deeper ports, according to Maersk and other shipping lines.

 NorthPort and Tauranga can be dredged to accommodate them. Tauranga is rail-connected; Northland
 Regional Council and other parties are working on connecting NorthPort to the rail network.
- 28 A term coined by Philip McDermott of CityScope Consulting in various reports for Auckland Regional Council and the Metro Auckland project.
- Author's extrapolation from mid-range projections by various source e.g. 2 million people by 2040 (see Part 2, "Auckland's Population") and 1.9–2.5 million by 2046 (ARC models).
- Author's extrapolations from Statistics New Zealand, *Demographic Trends: 2007*, http://www.stats.govt.nz/analytical-reports/dem-trends-07/default.htm, pages 160–167.
- 31 Statistics New Zealand, ibid., Series 5 projection for 2061, page 149.
- 32 http://www.teara.govt.nz/Places/Auckland/Auckland/5/ENZ-Resources/Standard/1/en
- 33 Author's extrapolation from CityScope Consultants, "Auckland's Population" (see Part 2).

timber laminates and composite bioplastics³⁴ that have displaced much of the steel and concrete even in tall buildings.

Given all that new construction, we've been able to remake this into a very liveable, ecocity. Getting a high concentration of homes and workplaces around the rail and road networks has allowed us to keep the urban area relatively compact.³⁵ This has helped us develop more diverse neighbourhoods with more amenities and more opportunities to work at home or in local businesses.

This vibrancy across the region ensures people still do plenty of travelling for work, entertainment, education, socialising, and recreation. And that in turn has helped develop a stronger sense of regional identity.

The remaking of much of the urban area has also given us the chance to create more open spaces and green corridors. Lots of regeneration of native plants in those places and in people's gardens has attracted flocks of native birds from the island sanctuaries out in the Hauraki Gulf.³⁶ Even kiwis nest on Mount Hobson and the other volcanic cones we turned into true nature reserves protected by predator-proof fences.

The city has evolved in many other ways too. For example, buildings and neighbourhoods do some of their own power generation, water capture, and waste treatment. These partially self-supporting local systems are linked through automated networks for the rest of their needs.

This has taken a lot of pressure off the highly centralised services, freeing them up in part for other uses. One showcase is the Mangere water treatment plant. From the algae it grows in its waste-processing stream,³⁷ it makes enough biofuel for one-third of our vehicles. The other two-thirds, of course, are electric.^{38, 39}

How could we afford all this investment? We could because we played our part to pioneer some of the big new technologies: cellulosic ethanol from trees⁴⁰ as a second-generation biofuel; lacto-pharmaceuticals; and telepresencing,⁴¹ which gives us multi-sensory, real-time connection with people around the world, overcoming much of our sense of isolation.

Overseas investment has played its part too. For example, SinoBioChem came to explore for oil shortly after we signed our 2008 free trade agreement with China.

- 34 Scion, http://www.scionresearch.com/about+biomaterials+engineering.aspx
- 35 ARC, 2050 regional growth strategy, http://www.arc.govt.nz/economy/aucklands-growth/aucklands-growth_home.cfm
- 36 Department of Conservation, http://www.doc.govt.nz/upload/documents/parks-and-recreation/places-to-visit/auckland/hauraki-gulf-islands-and-marine-reserves-brochurefeb-o6.pdf
- 37 New Zealand's biofuel potential, various sources, e.g. Aquaflow, http://www.aquaflowgroup.com/about.
- 38 EECA, Biofuels and Electric Vehicles conference, 2008, http://www.eeca.govt.nz/renewable-energy/biofuels/biofuels-conference-08/index.html
- 39 Shell Oil's 2050 energy scenarios, http://www.shell.com/home/content/aboutshell/our_strategy/shell_global_scenarios/dir_global_scenarios_07112006.html
- 40 Scion http://www.scionresearch.com/media+releases.aspx?PageContentID=1175
- 41 http://en.wikipedia.org/wiki/Telepresence

Their consortium found our first billion-barrel oilfield in the Great South Basin, 42 off Stewart Island.

With prices sky high, they pumped like crazy. But when they failed to find any more fields, they wised up. The crude had some special qualities so they saved the rest for feedstock for the very high-value pharmaceuticals, plastics, and other compounds they make down at Bluff.

As they ramped up their investment in science, manufacturing, and commercial operations around the country, SinoBioChem's Australasian-South Pacific headquarters grew here in Auckland. Its presence is one of many reasons that Mandarin is widely taught in local schools these days.

We've also done well growing many of our own international companies across a range of industries. But we've also lost some. The biggest blow was Fonterra's decision to move its global headquarters to Singapore in 2017. It argued it needed to be nearer to its customers and its rapidly growing number of farmers overseas.⁴³ You couldn't run a major multinational from down here, it said.

But it came back. What happened was a new chief executive took over Fonterra about 10 years after it went offshore. He was a Kiwi who'd had a great career at Nestlé but he was pipped for the top post so Fonterra headhunted him.

But he'd come to realise how important Nestlé's corporate culture was, a powerful blend of its Swiss origins and European, American, and Asian influences. And being true to its roots was the absolute key to creating this strong, unique, global culture for staff from 140 countries.

Nestlé has had its headquarters in Vevey, a town on Lake Geneva, since the 1870s.⁴⁴ It grew to be the world's largest food company. Yet, its home town was only one-third the size of Invercargill was before we had our oil boom. Now Vevey's about a fifth the size.

So, Fonterra came home from its OE and has never looked back. While it has remained a global dairy commodity producer and seller, it needed to find a much higher value, more specialised role for dairy farmers here. They could no longer compete in commodity markets. So Fonterra used its strong cash flow from commodities to invest heavily in research, becoming one of the world leaders in making pharmaceuticals from compounds within milk. Its senior executives, a mini-UN of nationalities, enjoy being based here in Auckland.

Great South Basin exploration programme, various sources, e.g. NZT&E, *Bright*, January 2008 edition, pages 14–17, http://www.nzte.govt.nz/common/files/br26-p14-17.pdf and http://www.beehive.govt.nz/release/great+south+basin+oil+and+gas+quest+set+begin+o

At some point in the future, half of Fonterra's milk will be supplied by overseas farmers and half by New Zealand farmers (the split is currently 20% to 80%): Henry van der Heyden, Fonterra's chairman, said in a presentation to the Large Herds Conference, New Plymouth, 3 April 2008.

http://www.nestle.com/AllAbout/History/HistoryList.htm

Growing businesses remains a challenge, particularly as the science becomes ever more demanding. When things go wrong, though, they can do so in spectacular fashion. Last week, a nano-biotechnology⁴⁵ plant in Rodney suffered a serious failure.

A huge global response kicked in almost instantaneously. Thanks to the power of Web 17.0, our emergency services were helped from around the world to model the potential disaster in real-time in virtual reality. So, thankfully no crisis developed. A monitoring drone is still hovering high in the sky over the site. It's directing the army of robots⁴⁶ still seeking out and capturing the escaped nano-particles with the help of overseas expertise.

This is just one demonstration of collective, global intelligence and decision making,⁴⁷ the sorts of skills we apply to hugely complex issues such as ecosystem measuring and monitoring.

Morning

The Mayor, splendid in sari and chains of office, fires the starting gun for a large class of little boats in the Auckland Day Regatta. The President⁴⁸ had done the honours for the biggest boats earlier in the morning,

The Mayor is standing far above the boats on the bridge of one of the city's fast ferries. These whisk people up the harbour, almost as quick as the train, to North City, the new centre for the north shore built three decades ago at Whenuapai.

And we've done well revitalising this old part of town where Hobson staked out Auckland more than 200 years ago. Beginning early this century, we started opening vistas through the city right up to the ridge at K Road. This helped re-reveal the topography of the city, it's natural skeleton and form. Studded with art works and other delights, they help integrate the old city on a very human scale.⁴⁹

Viewed from the water, the city offers fine vistas. One is the diagonal from Viaduct Harbour past the spire of St Matthew-in-the-City to the top of Symonds Street. It took 30 years to create as buildings along its line were gradually redeveloped.

People are thronging the waterfront by the old ferry building, as they are all the way from the iconic entertainment complex in the Wynyard Wharf park right along to the new ocean passenger terminal in Mechanics Bay.

Regatta Day is one of many festivals through the year. One of the most popular is the WaterFire Festival at Matariki. We borrowed the idea 50 years or so ago from Providence,

⁴⁵ UN, The Millennium Project, 2007 State of the Future report, Chapter 4, Science and Technology, page 10.

⁴⁶ Hirose, Shigeo (Tokyo Institute of Technology), in *The Way We Will Be 50 Years From Today*, editors Mike Wallace and Bill Adler, publisher Thomas Nelson, 2008, page 86.

⁴⁷ UN, 2007 State of the Future, Chapter 4, multiple references pages 5–364.

Statistics New Zealand, 2006-50, op. cit., page 12.

⁴⁹ Reid, Richard. Auckland City CBD Public Artwork Development Plan, http://www.aucklandcity.govt.nz/council/documents/cbdpublicart/default.asp. Mr Reid's work was winner of the Charlie Challenger Supreme Award in the 2006 New Zealand Institute of Landscape Architects Awards.

Rhode Island, in the United States.⁵⁰ But we've made it our own. On the longest night of the year, seven huge floating fire sculptures, representing the seven stars of Matariki/Pleiades, are anchored 100 m off the waterfront.

From sunset to past midnight, black-clad performers in torch-lit boats quietly tend the fires while music from around the world plays along the waterfront. Despite it being a long and usually chill evening, many hardy souls linger in cafes, bars, and parks until about half an hour before dawn. Then they gaze at the northeast horizon, watching Matariki rising. It is such a wonderfully contemplative, hopeful time of year, of new plantings, of new beginnings.

Today's almost as busy on the waterfront. Many of the people are heading into the main square for a referendum rally. This coming week is the next monthly vote and it's a very big one: on the region's next 20-year eco-budget.⁵¹

This is causing a lot of soul-searching. Since we learnt how to precisely monitor our role in the ecosystem, we've set and met demanding goals. Thanks to this, better technology and the likes of closed-cycle manufacturing and resource processes, 52 we've allowed the ecosystem to recover some of its health. We think we're back up to 1985 levels but we aren't sure because our knowledge was so limited then.

It's always taken us a long time and a lot of debate to agree on these budgets. And then a lot of discipline, reinforced by stiff penalties, to keep them. They underpin every environmental, economic, and social policy we implement.

Yet they have delivered what a lot of people said they wanted – a healthy environment, a cohesive society, and a robust economy.⁵³ There was a time when many believed that was impossible.

This sentiment came to light more than 50 years ago in the work of Landcare Research. It spent several years on a big future-thinking exercise. With a high degree of unanimity, citizens involved in the study said they wanted to live in a wealthy, sustainable society in all senses of the word: environmental, economic, cultural, and social. But they expected they'd get the opposite.⁵⁴

Many factors have helped us get what we want rather than what we feared. But crucially, local governance was ambitious in its strategies, efficient in its operations, and responsive to its citizens.

While we have achieved a lot as a region, the debate over our next eco-budget has inevitably given voice to a wide range of opinions. One of our most successful

- Landry, Charles, "Bonding across cultures and groups", in *The Art of City Making*, London: Earthscan, 2006, page 182.
- 51 ICLEI http://www.iclei.org and http://en.wikipedia.org/wiki/ICLEI; and ICLEI's eco-budget tools, http://ecobudget.com/index.php?id=4631
- Multiple sources including: McDonough, William and Braungart, Michael. Cradle to Cradle: Remaking The Way we Make Things, New York, 2002; and other McDonough writings, http://www.mcdonough.com/writings.htm; The New Industrial Revolution, http://en.wikipedia.org/wiki/New_Industrial_Revolution; Life cycle assessment, http://en.wikipedia.org/wiki/Life_cycle_assessment
- 53 Landcare Research, Four Scenarios, page 76.
- 54 Landcare Research, ibid.

international entrepreneurs is campaigning for more flexible goals. He says our decision making is too slow, our adoption of new technology too timid, and our independent line in international bodies too risky. If we don't change course, he says he'll move his operations to Singapore.

At the other end of the spectrum, a fair few people are as unhappy as ever with our engagement with the world and use of the environment. We're doing well on most of the measures in the global Genuine Progress Indicator,⁵⁵ which benchmarks us against a wide range of economic, environmental, and society factors. But some people want an even stricter eco-budget just to be sure we're doing the right thing by the planet. Some of them even want to shut down the WaterFire Festival because of the CO₂ emissions from the fire sculptures.

All these views and many more matter. Thanks to the power of communications, we citizens are truly empowered. We aren't voting in this referendum on an eco-budget proposed by politicians or bureaucrats. We will shape and agree it together online, just as we first learned to do in much simpler forms with collective knowledge banks such as the very first, Wikipedia. What we decide, our local government implements.⁵⁶

Most people are pretty savvy these days. They know the prices of fresh water, carbon, amino acids, precious metals for fuel cells, and all the other resource commodities traded on the global enviro-markets. They know we need to conserve very carefully, particularly given the increasing volatility of the markets.

They had a timely reminder with this morning's shocks through global markets. This time, it was triggered by fears for Pacific fisheries after this week's series of cyclones right up to Hawaii.

Noon

A very special bunch of young people have gathered in one of Waitakere's libraries. They are taking part in a great, old international competition that challenges secondary school students to solve our future problems. Ten Kiwi teams, winners of categories in the hard-fought national competition, are competing live but virtually in the Global Future Problem Solving Competition⁵⁷ being held this year in Bangalore, India.

This year, they have been set a particularly tough challenge, one our scientists are working on. "Given that animal protein is in very short supply in the world, that feeding animals remains an energy-inefficient way to grow protein and that we can grow meat in laboratories from stem cells,⁵⁸ what are the ethical, environmental, economic, and social issues about using this technology and banning animal farming?"

New Zealand teams have consistently done well in global future problem solving competitions because they think differently. Our teams have long had students from

⁵⁵ http://en.wikipedia.org/wiki/Genuine_Progress_Indicator

International Association for Public Participation, http://www.iap2.org and Participation Spectrum tools, http://www.iap2.org/associations/4748/files/IAP2%20Spectrum_vertical.pdf

⁵⁷ Future Problem Solving Program International, http://www.fpspi.org

⁵⁸ UN, 2007 State of the Future, Chapter 4, page 336.

all sorts of ethnic backgrounds. Pākehā, for example, ceased to be a majority of the population in Auckland back in 2016.⁵⁹ And many team members down through the years have been recent immigrants. Yet, we learnt to rapidly acculturate them into New Zealand while they bring their own distinctive knowledge and insights to us.

And this library venue for this year's competition is a story in itself. Back in the early days of the internet, librarians realised the revolutionary technology was turning their world inside out. 60 People might still come in for a few books. But increasingly, they were reaching out to the world for information.

Yes, they could do that from computers at home or office. But libraries learnt to offer more. They helped to make sense of distant information and helped to create, share, and keep local knowledge. They are pulsing places of creativity and communication, locally and with the world. In a rapidly homogenising world where one culture ever more melds with another, they demonstrate the enduring power of sharing and learning together in our own distinctive way.

The community board did a great job helping to turn this library into one of the best in the country. Drawing on its local support, powers and ample financial resources from local government, it brought together this library and local schools in life-long learning and storytelling for the community.

Across the region, these boards play a powerful role. At the last local government election, candidates from more than 60 ethnicities gained seats on council and community boards. These non-Pākehā representatives are the majority overall but not on some boards. In terms of representation, the biggest problem these days is getting more men to stand.

Thanks to these boards, many of our communities have developed strong senses of local purpose and identity. They keep building on their diverse ethnicities, particularly through local projects, festivals, and events. They are many and varied.

So, sweetness and light dawn across the region? Far from it. Crime, racial tension, and social deprivation still rack some of our neighbourhoods. Don't blame the communities. Many of their boards have helped improve the delivery of devolved social services. But, as ever, society as a whole still struggles to help all progress.

Afternoon

In mid-afternoon, a large crowd gathers at the marae at the heart of the Unitec campus in Mount Albert. Completed 50 years ago, the whare whakairo (carved meeting house) is an intriguing blend of traditional building techniques and modern sustainability technology. Its carvings and other art works tell the interwoven story of Māori and Pākehā in our region, Tāmaki-makau-rau, down through more than 200 years.

⁵⁹ See Part 2, "Auckland's Population", section 9.

⁶⁰ New Zealand Public Libraries Summit, Wellington, 26-27 February 2007, http://www.natlib.govt.nz/files/summit/index.html

⁶¹ New Zealand's Digital Strategy, http://www.digitalstrategy.govt.nz/Parts-of-the-Digital-Strategy/Content

Today, the marae is hosting many people for a great celebration of a great person. They soon fill the ātea in front of the whare. Everyone has some connection with each other, given it's so easy in a tiny country such as ours for people to work together. But this is a particularly rich network. In chronological order from the beginning of the saga the gathering includes

- long-term survivors from a Māori diabetes self-care programme that started in Auckland
- the now elderly medical researchers and doctors who pioneered the early-diagnosis tools, drugs, and therapies that tackled the disease, as well as the community health workers who developed the self-care and prevention programmes that combated the raging epidemic⁶²
- the Ngāti Whātua entrepreneurs who developed these skills and intellectual property into a diabetes prevention business they took national, then international via floating their company on the New York Stock Exchange.

In its early days, the latter company went through a business school programme for enterprises born with global ambitions. A dozen other start-ups were in its cohort on the programme. The founders of many of them are here today because they too have become successfully internationally. They exemplify the unique business model we've developed in New Zealand: mini-multinational companies that play to their quintessential Kiwi strengths yet maximise their talents globally⁶³ – hence the M3 designation by which the model is known.

M3 has been widely adapted and emulated by other small companies in other small countries seeking their fortunes in the global economy. M3Global, an Auckland-based organisation, has helped them along the journey. For many years now, it has taught the M3 skills here and in dozens of developed and developing countries. These days it also offers a virtual reality programme from Auckland.

At the centre of this scrum of people is a slight woman, in her late 60s, with an abundance of quiet, natural mana and a muckle of mokopuna around her. She is Min Te Ua, the founder and former head of research at M3Global. Today's celebration is in her honour.

Her husband, Haare te Ua, is trying to divert the kids. Haare's very good at rounding people up. He's chief executive of Ngāti Porou's 30,000 ha of permanent forests sink that his iwi set up on the East Cape back in 2006 as a joint venture with Sustainable Forestry Management of the UK.⁶⁴

⁶² Multiple sources, e.g. Diabetes New Zealand, http://www.diabetes.org.nz/about_diabetes/diabetes_in_ new_zealand_in_2025

⁶³ Chris Liddell and Rod Oram, presentation at Microsoft Connect '06 conferences, November 2006.

See "Sustainable Forestry Management (SFM) Ltd and Rakaikura Ltd" in News section: http://www.sfm.bm/ Home/LibraryF.htm

Way back when Min⁶⁵ was a shy young teenager not long after her family emigrated from Seoul, she was involved in the UpStart programme in South Auckland that still today helps kids in some of our toughest neighbourhoods develop their entrepreneurial skills.

Later as a university student, Min led a team that won the global Students in Free Enterprise⁶⁶ competition two years in a row. Studying for her MBA, she began working with Māori entrepreneurs. Min then went overseas to earn her PhD in behavioural economics from the University of Chicago⁶⁷ and then teach at University of the Witwatersrand, Johannesburg,⁶⁸ and Chongqing⁶⁹ Technology and Business University, Sichuan province, China.

When she came home to her Auckland alma mater after seven years abroad, she started a "going global"⁷⁰ programme for small New Zealand companies attempting to build business overseas. The Ngāti Whātua start-up was in her first cohort.

Over the next 20 years, M3Global developed a worldwide reach and reputation. Many of its alumni businesses from more than a dozen countries developed into sizable companies.

As a result, Min was invited to deliver a series of lectures on the role of small businesses in the global economy at the 2042 Earth Summit, the series of once-a-decade sustainable development conferences the UN had begun in Rio de Janeiro in 1992.

Min's speeches were electrifying. Soon afterwards, the United Nations Industrial Development Organisation asked her to found a global equivalent of her organisation under the UN banner.

She was very keen to do so but it took nearly three years to get it up and running. The UN kept insisting on headquartering M₃G in a developing country. But Min was adamant it had to be in Auckland. The people coming to M₃G needed to get away, get a fresh perspective, learn some new things. Coming as far away as anybody could, all the way to New Zealand, was essential she said.

Min eventually got her way. So tomorrow, she opens the United Nation's M3G conference downtown. More than 1,000 delegates have already arrived. This global whānau will be celebrating not just UN M3G's first 15 years. It will be honouring Min for the Nobel Prize for

⁶⁵ Min, Korean girl's name meaning "eternal, cleverness and intelligence", http://www.babynology.com/meaning-min-f₃8.html

⁶⁶ http://www.sife.org/Pages/default.aspx

⁶⁷ Richard Thaler of the University of Chicago is today one of the pioneers of behavioural economics, http://en.wikipedia.org/wiki/Richard_Thaler

Witwatersrand University, http://en.wikipedia.org/wiki/University_of_the_Witwatersrand and Graduate School of Public and Development Management, http://web.wits.ac.za/Academic/CLM/Schools/PublicDevelopmentManagement.htm and Mandela Institute, http://www.law.wits.ac.za/mi/

From the late 1990s, Chongqing "became the spearhead of China's effort to develop its western regions and coordinate the resettlement of residents from the reservoir areas of the Three Gorges Dam project", http://en.wikipedia.org/wiki/Chongqing

The ICE House, the entrepreneurship centre of the University of Auckland Business School, began a similar programme called ICE Global in 2006, http://theicehouse.co.nz/export.html

Economics she won last year. Her citation at the award ceremony in Stockholm early last December read in part:

"Professor Min Park Te Ua's work has brought significant economic prosperity and social progress to both rich and poor societies alike. By pioneering business skills that enable small organisations to participate fully in the global economy, she has helped hundreds of millions of people fulfil much more of their potential.

"Her work is distinguished by its intellectual rigour, its creativity, its practicality, its accessibility to people...and above all by its profound and fresh insights into the human relationships at the heart of economic and social progress."

Evening

In the Auckland Town Hall, a great occasion and some marvellous music is promised by the Auckland Philharmonia and its sister ensemble, the Leipzig Gewandhaus Orchestra.

The hall is packed and Aotea Square is filling up quite nicely with the overflow, people who are happy enough with the outdoor screens.

But this isn't the only show in town tonight. For example, there's a jazz festival down at the historic Villa Maria cellar and restaurant near Auckland International Airport. In addition to the music, they're offering a food and wine matching with some of the latest nutraceuticals, foods with medicinal benefits, from the nearby food innovation centre of excellence.

And then, of course, there's the All Blacks test tonight at Eden Park. It'll be a great game. The ABs are taking on the winners of last year's World Cup, Japan. A great row still rumbles on over the Japanese players' use of bio-mechanical enhancements.

Ever the optimist, many people believe the ABs – "100% pure; no enhancements" – have a chance against the Japanese tonight. But if they win, nobody's sure they can keep up their form all the way through to the next World Cup in 2063 in Buenos Aires.

No doubt more than a few concert-goers will be keeping a discreet eye on the game via their unobtrusive retinal visualisers. The audience quietens as the members of the Leipzig Orchestra take the stage of the Town Hall. The Germans look so real, even though their holograms are beamed all the way from Leipzig.

The gala concert tonight marks the 50th anniversary of the establishment of the link between the two orchestras. They bonded because of fascinating quirk of history.

Our Town Hall was built 150 years ago as an exact replica of Leipzig's second Gewandhaus ("Cloth Hall").⁷¹ It was chosen as the model because it had reputedly one of the best concert hall acoustics in Europe at the time.⁷² And we're still the beneficiaries today.

That precious Leipzig landmark was destroyed by Allied bombers in 1944. In a very real sense our Town Hall is the living embodiment of it. So back in 2010 when our Town Hall

⁷¹ http://en.wikipedia.org/wiki/Gewandhaus

⁷² http://en.wikipedia.org/wiki/Auckland_Town_Hall

premiered the rebuilding of its massive pipe organ by the Johannes Klais Orgelbau⁷³ workshop of Bonn, the Leipzig orchestra made their first trip down here to play. Of course, back then, they had to come in person.

This evening's concert taps right into the roots of each orchestra's repertoire and identity. The Germans will do one of the Bach pieces they had on the programme of their concert in 1781⁷⁴ at the opening of the first Gewandhaus. It will be followed by a new work by a Turko-German composer. The Auckland Philharmonia will play an old favourite of local audiences, Gareth Farr's *From the Depths Sound the Sea Gongs*, and a new work by an Auckland composer featuring a prodigious array of Māori nose flutes and Chinese lutes. It will be interesting to watch the faces of the Leipzig audience, beamed in from their postwar Gewandhaus.

Over the past 50 years the two orchestras have worked very closely together, learning, inspiring, and supporting each other. The Leipzig orchestra's annual visit is a centrepiece of Auckland's international arts festival each July, which attracts large numbers of visitors and performers from around the world.

A very unusual feature of the festival is the way it showcases collaborations between Aucklanders of various ethnic backgrounds with artists from their home countries such as Pacific peoples, Indians, and Chinese. The overseas visitors – artists and festival-goers – refresh our cultural roots; and we enrich them with South Pacific variations of their cultures.

Late Evening

Buoyed by the stimulating music, the audience leaves the hall and spills out on to Queen Street. One couple is approached by a pair of tourists seeking directions. It turns out they're from the Comoros Islands.⁷⁵ While we all fly less than we used to, there are real benefits. These days, tourists typically come to New Zealand only once or twice in their lives but stay on average six weeks. They want to get to know us, share our lives.

The local couple offer to show the tourists the way down to the waterfront. They lead the way boarding the tram, although the husband is moving a little gingerly. He is waiting for his new pair of lungs. A lab in Otara is custom-growing them from his stem cells.⁷⁶

As they ride down Queen Street, a scuffle of people up Durham Street East catches the attention of the quartet. A bunch of young women are beating each other up, cheered on by a gang of drunken lads. Sirens wailing, lights flashing, a police car races up Queen Street. A couple of officers jump out to quell them. If they are first-time offenders, they'll probably be given a spell helping out in the reception centre for eco-refugees.

⁷³ http://www.aucklandorgan.org.nz/

⁷⁴ http://www.gewandhaus.de/gwh.site,postext,history-gewandhausorchester.html

[&]quot;Comoros Islands is the country most vulnerable to climate change": Global risk assessment, July 2008, by Maplecroft, http://www.maplecroft.com; Media report, http://www.independent.co.uk/environment/climate-change/why-canada-is-the-best-haven-from-climate-change-860001.html

Multiple sources e.g. Francis Collins, leader of the Human Genome Project, in 50 Years From Today, page 4; and UN, 2007 State of the Future, Chapter 4, page 163.

Part 12. Auckland 2060

Down the length of Queen Street, the lights are burning late in some of the office buildings. These are the trading floors of the big global enviro-trading firms and they are preparing for an anxious night. Markets have had a rough couple of trading days because of the series of storms across the Pacific.

We play a crucial role as an international trading centre, thanks to the early start we made on carbon trading 50 years or so ago. So, it will be another stormy night – but this one financial rather than physical.

Yet, as day follows night, so the nocturnal calls of the kiwi on Mount Hobson will give way to the dawn chorus of chortling tuis,⁷⁷ once again energising Aucklanders for a new and challenging day.