14 CITIES

Implausible futures for Australian cities
The city of La Niña is built on terraformed Australian territory in the Pacific and is the only Australian city built on climate change itself.

The expansion of the Australian continental shelf in 2008 increased the country’s territory by 2.5m sq km, and as the Australian interior has become ever more inhospitable, a shift out to sea seemed inevitable.

Two technological breakthroughs - in the construction of adaptive terraformed land and in harnessing of energy from intercontinental weather patterns - enabled this new city to emerge from the rising sea levels off north NSW.

Equidistant from Brisbane and Sydney, both of which were by this time slowly sinking, La Niña also orients itself towards the United States, South America and Japan, taking advantage of the New Pacific Economic Environment.

Built on expandable platforms that keep the city aloft of rising water levels, La Niña is powered entirely by the El Nino Southern Oscillation, which climate change has increased to an annual event as opposed to every three to eight years.

High altitude kites harvest the wind movements in the sky above La Niña, energy coursing down gossamer threads to transformers kilometres below. La Niña also harnesses tidal power from giant tentacular outriggers.

#1
As the Gold Coast’s canals finally began to disappear beneath the waters of the rising Pacific in May 2041, it became embarrassingly clear that the Gold Coast Development Corporation was faced with a stark choice: retreat or adapt.

Whilst a few die-hard Gold Coast dwellers decided to construct small floating harbours of pontoons, lashed together and floating sentimentally above their former properties, a more expansive development began to emerge around the partly submerged towers on the coast. After the towers had been sealed, each became the pinion in a large circular partially-algal platform structure floating on the clear blue water. This structure is inhabitable above water and rapidly growing beneath, as chemically-controlled beneficial blooms naturally cleanse the effluent and exhaust from the constant small boat traffic, reduces ambient temperature, and generates cheap energy transforming CO$_2$ into lipids (oils). The increasingly intense heat above the water causes other varieties of megaflora to emerge, creating rippling tropical forests around the circular platforms laced through the towers.

Underwater, the lower floors of the old towers contain glass-lined hotel rooms with views onto the new reef of a turquoise drowned world of Karl Langer hotels and barnacled neon silhouette signs. Algalia’s economy is in both tourism and algae-derived oil exports.

#2
By 2050, Darwin had effectively freed itself of its moorings in NT and was floating north, culturally and politically at least. Through a deal concocted between the Chinese and Australian governments in 2032, Darwin became a city-state ‘special economic zone’ free of national sovereignty but under Chinese political control, almost like a reversal of Hong Kong’s position under British rule. This meant the city was free to grow rapidly, becoming a thriving entrepôt exporting Australian resources and importing Chinese creativity, though its alliance with both the vast cities of Singapore and Jakarta are also key. Thus it comprises part of the South-East Asia megalopolis, a string of city-states running up to Hong Kong.

The primary language is Mandarin, with streets signs in both hanzi and pinyin, though Cantonese and Australian English are also spoken. Unencumbered by Australian-style planning policies, the skyline soars vertically with gleaming skyscrapers of organic forms, whilst the horizontal expansion is through a high-density sprawl, high-speed subways connecting the suburbs, and a vast high-speed rail bridge connecting Darwin S.E.Z. directly to Indonesia.

The city remains a curious hybrid of Australian and Chinese cultures — with Casuarina Beach clear of box jellyfish for the first time in its history thanks to Chinese technological know-how, surfing is popular.
RE-INDUSTRIAL CITY

The advances in various light manufacturing technologies throughout the early part of the 21st century — rapid prototyping, 3D printing and various local clean energy sources — enabled a return of industry to the city. Noise, pollution and other externalities were so low as to be insignificant, and allied to the nascent interest in digitally-enabled craft at the turn of the century, by the early 2020s suburbs had become light industrial zones once again.

Waterloo, Alexandria and the Inner West of Sydney through to Pyrmont once again became a thriving manufacturing centre, albeit on a domestic scale, as people were able to ‘micro-manufacture’ products from their backyard, or send designs to mass-manufacture hubs supported by logistics networks of electric delivery vans and trains. Melbourne had led the way through its nurturing of production in the creative industries and its existing built fabric.

In an ironic twist, former warehouses and factories are being partially converted from apartments back into warehouses and factories. Yet the domestic scale of the technologies means they can coexist with living spaces, actually suggesting a return to the craftsman’s studio model of the Middle Ages. The ‘faber’ movement — *faber*, to make — spread through most Australian cities, with the ‘re-industrial city’ as the result, a genuinely mixed-use productive place — with an identity.
Harry stepped out of his house onto the old iron floorplate of the Sydney Harbour Bridge, sipping an espresso. Since the car traffic had been removed, leaving only one light-rail line connecting the north and south shores, it had become something of a ‘living bridge’ in every sense. Harry’s street stretched horizontally and vertically, as well as diagonally on guyropes across to Sirius, the old public housing block now connected physically to the bridge. Each of the cube-like blocks of Sirius looked as if it had been repeated, as if copied and pasted liberally onto the edges of the bridge.

The vertical street above Harry’s head was also composed of these modular blocks. The ‘dupe’ technology had emerged in the mid-2030s, as Sydney’s CBD had become incapable of being developed by traditional means, due to lack of space, finance and interest. Combined with the fact that post-peak oil virtually no-one could actually commute to the city, the city needed to find a way of introducing residential space within the vicinity of commercial space, without losing the latter.

Hence Dupe. A modular building technology, it enabled simple blocks to attach and accrete anywhere and to anything, such that towers were blistered with these barnacles, often cantilevering out across the streets below. Harry used to live on the Western Distributor, a similarly encrusted structure...
NEW SUNSHINE

By 2045, the Sunshine Coast had effectively become a single urban conurbation stretching from Caloundra to Cooloola, eventually known as New Sunshine. Coordinated and governed by the New Sunshine City Council, the average age of the city is 72 and rising, lending the place a special atmosphere, form and series of functions.

The ongoing surge of retirees means the new city is a living showcase of the ‘demographic timebomb’. Yet this has been re-cast as an advantage, an idealised community for Australia’s elderly, an urban paradise for the superannuated. The council retrofitted a richly diverse urban form, characterised by fitness for two things: local climate, and old age.

As the number of Australian with dementia had tripled between 2009 and 2050, part of this design is ‘soft infrastructure’ — for instance, living rooms have responsive photo-frames that reinforce the identity of close family via shared ambient presence.

Yet the wisdom of these senior citizens is also harnessed, via numerous on-demand consultancies run from shared work-centres. Transit is by rubberised PRT pods and slow-moving light-rail that leans towards the wide, non-slip pavements. Gradients are non-existant. New Sunshine’s street-signs are in large print and audio. Golf is played through the streets on Sundays, while the club scene is justly infamous.
“(The bush) was biding its time with a terrible ageless watchfulness, waiting for a far-off end, watching the myriad intruding white men.”
D.H. Lawrence, Kangaroo (1923)

A century later that end seemed not so far-off, and it was becoming abundantly clear that the interior would soon be as uninhabitable as the ocean on the other sides of Australia’s great cities.

As bushfires ravaged the land through the summer months and dust-storms and freak weather events characterised the winter, the cities clinging to Australia’s coastline could increasingly be seen as a string of pearls tracing the outline of a nation that also seemed a concept of another time.

The Australian Republic had been finally achieved in 2019, after the death of Queen Elizabeth II, also enabling the deletion of the state governments. Then Darwin was ‘sold’ to the Chinese in 2032, becoming a thriving special economic zone. Finally, Canberra lies effectively deserted, only the staff of Prime Minister Wong remain, as if the captain of a sinking ship. Much of the interior is similarly devoid of humans.

The large cities realised they were effectively working most successfully as city-states, and after lacing a high-speed rail network around the entire perimeter of the island-continent, they declared themselves to be city-states formally, islands in an archipelago of conurbations.
The ‘Macau of the South’, Star City emerged from the ruins of the deadly Sydney casino fire in 2014. Still assumed to be arson committed by the disgruntled local residents of Pyrmont and Ultimo, upset at the casino’s impact on local traffic, business and architecture, Star City had been burnt to the ground and lay in ruins for some months.

While another local theory that the fire was an insurance scam also cannot be disproved, the casino had outgrown its Pyrmont location and had been looking for an excuse to move.

Yet no-one expected the scale of the move, just as no-one in Queensland expected the state government’s continuing pursuit of businesses from south of the border to extend to donating both Moreton Island and North Stradbroke Island to the now-Chinese-owned gambling chain.

Linked by high-speed rail bridges to Brisbane Airport and with its own landing strip terraformed off the eastern edge of the islands welcoming visitors from Indonesia, Malaysia and China, Star City offers thrill-seekers a unique combination of risk and comfort, faux-classical architecture and vast strips of white sand beaches.

An incoming visitor population of 10,000 augments the 25,000 permanent residents that live across both islands, principally in the 15 high-rise towers known as the ‘Stars of the Star City’ for the late-night light-show that can be seen from Brisbane.
From his observation tower, Mark looked across the expanses of waste treatment plants stretching into the distance. To his left he could see the marshlands responsible for cleaning the city’s waste water. He couldn’t look directly to his right, due to the glare from the seven kilometre-wide solar power plant that lay off the northern perimeter of the city’s walls.

He put his rifle down, leaning it against the thick wooden walls of the tower. Slowly unpeeling a shrivelled dwarf banana, Mark cast a glance back towards the interior of the walled city, over the bamboo roofs bleached white by the sun, the arrays of twirling vertical axis wind turbines and a handful of satellite dishes and radio masts.

The Walled City of Wollongong had been built around the Kembla Grange Golf Course after the water riots of 2048 had left the city largely in ruins.

Mark had been part of a group of no more than one hundred citizens that decided to build a “genuinely sustainable city”, a city that controlled its population in line with its resources, that controlled its resources in line with what naturally-occurring energy it could harvest and whose waste it could process, that could see its own footprint directly by limiting the city’s size by that of the 400 hectares of land required to support it.

Mark quickly picked up the rifle. He thought he’d seen a flash of movement in the marshland ...
Sometime after becoming Lord Mayor of Adelaide, Maggie Beer declared the city the first official ‘slow city’ in the southern hemisphere, moving Adelaide in line with a growing international movement comprising several cities in Tuscany and Provence, a few in Germany and Japan, and Portland, Oregon.

Though it initially seemed to concern restaurant ordinance and generous financial help for particular kinds of food production, it eventually became clear that Mayor Beer had more radical changes in mind.

Sidewalks became ‘widewalks’, with cars largely pushed to one side in favour of active transports of walking and biking. Delivery networks were transformed by the use of smart technology augmenting a centuries-old infrastructure of handcarts and bicycles. Driving schoolchildren to school was banned in favour of ‘human buses’ of schoolkids walking together.

Architecturally, Adelaide has begun to explore the use of wood and paper in construction, building up to nine stories with cross-laminated solid timber panels, and in low-rise with reinforced paper/cardboard structures designed by ‘designer-in-residence’ Shigeru Ban, meaning structures could be repaired, replaced and reconfigured by hand, and by residents. The city began to coalesce around walkable spaces, withdrawing from its outer edges. However, quince paste is still the largest export commodity.
Though some claim it is merely a frivolous architectural theme park without the attractions, others have declared it to be the most interesting urban experience in Australia. For Sonovac is a city designed with as much attention given to sound as is usually given to sight.

After the independently wealthy Lord Mayor of Hastings, Victoria, Gavin Stark, lost his sight in a freak boating accident and gained an interest in the ideas of Finnish architect Juhani Pallasmaa — who decried the ‘ocularcentric’ nature of most architecture — Stark has carefully reconfigured Hastings as “Sonovac, a city designed to heighten the senses”.

Stark’s council’s first move twas to ban traditional traffic from the city, instead favouring electric vehicles. The sound of these has been calibrated to be generated by particular locales: an array of pipa and guan strike up as you drive through the city’s small Chinatown. Elsewhere, sound designers have ‘primed’ the streets with latent compositions, which are then performed by the passing cars. All public art is sound art.

Three giant concrete ‘acoustic mirrors’ have been imported from Dungeness, UK, and sit on the promenade, amplifying the sounds of the ocean.

Streets are designed to muffle, cloak and dissemble industrial noise, through the careful use of materials and foliage, and the city has become home to a thriving music scene.
An output of the most stringently applied planning codes possible, the Fractal City comprises most of the new City of Newcastle, NSW, rebuilt after the Great Earthquake of 2019.

In a twist of fate, only the unloved CBD of the original city remained standing, and is still home to the thriving small business culture that had inhabited the near-derelict buildings before the earthquake. Yet most of the rest of the city could be redesigned from scratch.

With its previous zoning failures in mind, the City took the concept of the fractal, and applied it to a form-based code. This meant that no area was zoned as one function. No suburb was solely residential. No business district was solely commercial. The city could be read as a mixed-use development at every stage.

An individual apartment was often home to production as well as residential and leisure activities, due to the predominance of knowledge industries and new smart manufacturing. The apartment complex could also be read as a local aggregation of production, residential and leisure activities. Though the emphasis shifted from block to block, no one component did one thing only. Each block could be read as an aggregation of these apartments, and each suburb an aggregation of these blocks.

Thus the city has multiple focal points for work, rest and play. Each apartment is a CBD.
Floating low over the Blue Mountains, the city of Tillandsia is named after a very particular plant genus.

Tillandsia — the plant — draws moisture and nutrients direct from the air itself (from dust, decaying leaves and insect matter), and so this air plant serves as both metaphor and native flora for the city.

Borne aloft on warm thermals rising around the Three Sisters, Tillandsia appears as a cloud of bubbles, its numerous sacs glowing with LED lighting and humming with activity. The bubbles are composed of ETFE and aerogel, the latter material lighter-than-air. Its gently twirling rotors are powered by solar energy harvested on the skin of the structures, and wind energy gathered by high-altitude kites. Thin guylines ascend into near-orbit above the floating city, also traced with arcs of lighting to warn nearby aircraft. At night, the structures look like a large cloud lit by internal lighting.

Tillandsia’s small but wealthy population has taken to the air, a stated attempt to ascend to a higher form of humanity, though they spend most of their time circling around the east coast of Australia they originally ascended from, where their plants can thrive and from where they can occasionally descend on small elevator pods, touching base with rural communities to exchange goods and services.
The pervasive deployment of sunglasses and white headphones had become a feature of the urban experience in the early 2000s.

At first glance, citizens during the 2020s seemed to have much in common. The glasses seemed a little bulkier, and had apparently integrated the headphones, but otherwise the streets were still full of people wandering around cocooned within the frames of their glasses and immersed in their own soundscapes.

Yet on other side of the glass, Sydney in 2025 is quite different. In fact, there are so many Sydneys in 2025 as to render the idea of one Sydney ridiculous. The city is experienced as an immersive projection, with data overlaid onto the physical fabric to the extent that only the most desirable built elements remain visible at all. All other items are cloaked by the glasses, just as all urban noise is filtered by the headphones. These remove unwelcome noise whilst heightening others, all set against a soundtrack of music, displaced ambient sounds, and a stream of commentary from other users.

Investment in the visual design layers of physical structures had plummeted as people began to inhabit other spaces in these places, overlaying their own architectures.

And yet, a few had recently started wandering the streets unadorned, eyes wide open, ears cocked, experiencing what was left of the unmediated city ...