The rhizomic city – a place for attachment

Dylan Brady

“The chief function of the city is to convert power into form, energy into culture, dead matter into the living symbols of art, and biological reproduction into social creativity.”

—Lewis Mumford, The City in History, 1961, p.571

The human city

The city is the pinnacle expression of human cultural organisation – the embodiment of our wrangling with energy. All the energy, all the roads, all the buildings and the lights, all the millions of tonnes of this and the billions of tonnes of that, all the trains and power stations, all the homes and offices – they are all a means, a manner and a pathway to grow our people.

When you view Earth from space on the dark hemisphere of our planet, the sparkling future world depicted as science fiction is revealed. A magnificent spangled network of filigree lines, of blazing hubs and spokes, of travelling points flowing like diamond blood through veins and arteries. Sometimes geometrical, precise and radial and then spontaneously reverting to contorted organisms, wrapping around mountains, rivers and seas.

This ‘invisible’ revelation of the night-time living city does not come and go every day, appearing and disappearing as we experience it from within. Rather, it is always alive, the lights are always on when it’s dark on the shadow side of our planet and the networks and centres and lines and veins all pulse and glow as if reflecting the daylight back from six billion solar collectors.

A city is not simply a collection of buildings, nor a network of roads, nor a series of power stations, be they coal, wind, solar or nuclear. The city is not even a singular object; it has long ago escaped the defensive walls that have become growth rings of historical sculpture subsumed within the pulsing living mass. Cities are no longer just organisations, they have become rhizomic organisms.

They are vast, coherent, confusing and ultimately symbiotic co-operations between humans and energy and matter and life. They are continuously changing. They have inertia and character, and they can be extraordinary and invigorating, dysfunctional and unhealthy all at the same time. It is perhaps the capacity of the city to hold conflicting positions, to house both grief and joy, to give form to elation and be the gutter of wretchedness, that gives the city its inertia and character, and that creates the places and time of opportunity within it.

Figure 1: Night city. Credit: NASA and Decibel Architecture (dB(A)) mash-up
The Multipli(City)

These extremes and multiplicities, these many stories woven together, overlapping, intersecting and rippling are the frisson generators that make cities the ultimate producers of art, of commerce and music, of architecture and the stories that it holds and creates. Australia is one of the world’s most urbanised populations on the planet, and Melbourne continues to enjoy one of the most consistently high ‘liveability’ ratings, reflecting the balanced and considered integration of all aspects of a living city.

Federation Square at the heart of Melbourne created a new cultural ground above railway tracks – a peripheral city centre on which Decibel Architecture’s Conductor, Dylan Brady, was the Project Architect for the facades over five years of imagining and building. This project set the benchmark in 1997 for high ideal sustainability and created within it Australia’s first ‘labyrinth’ – a natural thermal battery, designed to use thermal inertia in ribbed concrete walls to shift the heat in the air from the day to the night, and the coolth of the night back to the day. This massive and passive coolth store was a key, yet hidden, part of the Environmentally Sustainable Design philosophy embedded into the project. Despite a multitude of such intricate and engaging sustainable design factors within the project, it was the facades and public forms of the highly-contingent, identity-making elements, and not the energy and water savings measures taken, that embedded Federation Square as a feisty, loved, maligned and always essential part of our social, cultural and urban identity.

Less energy, more energetic

It is our proposition that the sustainable city is not one that simply uses less energy, but one that creates a surplus of energy, of ideas and enthusiasm. A collective that is more than the sum of its parts, and that can move beyond a purely human-centric place, to a place where ecological and ethical foundations are balanced to support the higher aspiration of custodianship, of transformation and the joy of life. We imagine a city that can capture the hearts and minds of not only its inhabitants, but, most critically, of their children and their children’s children and the multitude of connective generations to come.
Leveraging our experience in complex facades gained on Federation Square, our work on the Suzhou Culture and Arts Centre, formerly known as the Suzhou Science and Cultural Arts Centre, sought to create a facade that could capture, embody and reflect the significance of Suzhou, the origin of the Chinese screen, within a modern context that blended culture and science. Our project, with a minor role to play in shading, was predominantly about creating a sustainable identity. The facade we created to wrap and define the project was unique, rich in detail and innovative and effective in materials and procurement. It has become the pattern of the place, painted into café walls, used on fabrics and recognisable by everyone who resides in and visits the project.

Clearly a sustainable city must be not only ‘smart’ but also wise, kind and inclusive. It must be collectively aware of its ecological integration and context. Sustainability is about endurance of an environment, ensuring continuation and ongoing existence. It is key, therefore, to define just what it is we want to sustain, what we wish would endure, as it cannot be the status quo. As is demonstrated clearly with a swift mental exercise, eternal growth of economies and production is simply not going to work – a measure of success based purely on GDP fails to capture (as New Zealand has recently demonstrated in its ‘Well-being Budget’ for 2019/20) the health of our nature, of wellness and purpose. It is imperative that we enshrine in the idea of sustainability not simply an austerity or focus purely on reduction in energy use, on industrial and technological ‘consumption and production’. We must look to new areas to ‘grow’ our existence.

As brilliantly illustrated by Kate Raworth in her book *Doughnut Economics*, the success of our growth must be strategic, distributed and balanced. Imagine if we were able as a society to report daily on not simply the price of oil or economic indicators, but on the growth of wisdom, of health, of wellness and kindness and love. Imagine if our technology was tuned to measure and report on carbon sequestered, on soil health, on global trees planted, oceans rejuvenated and breakthroughs in ecological harmony. Just imagine.

World’s highest rating ≠ world’s most sustainable building

Pixel was a direct commission to deliver a purpose-designed ‘sustainable’ building; a demonstration office to be rated as high as possible in Greenstar, Leadership in Energy and Environmental Design (LEED) and Building Research Establishment Environmental Assessment Method (BREEAM), thereby becoming a Rosetta Stone of rating tools in the process. We learnt through this process an important understanding: that rating tools are to sustainability as religion is to spirituality – each forms a doctrine and dogma of interpretation around something that is inherent and shared. We built in every possible innovation and approach to reduce energy, to
minimise operational cost, to use ‘biomimicry’ (at the time an unrecognised approach) to recreate ecological cycles and to demonstrate exceptional integration of structure, services and operation. We were briefed to create a bland building. We thankfully ignored that and created a boldly dynamic and colourful proposition that subsequently achieved, and sadly still holds, the highest ever rating in LEED and Greenstar. Pixel became an icon of green design due to its crazy explosion of energy in design, not just its saving of energy but a poster child for green thinking and radical departures from the status quo.

We took everything we knew from Pixel and applied it to the design and delivery of Phoenix Valley and the Lotus Park in China. These facilities form the core of a major cultural precinct at the People’s Square in Wujin, Changzhou, Jiangsu, Victoria’s sister state. The buildings and precinct utilise every learning from Pixel on radically larger scales: an 800-person theatre, a cinema complex, gallery and school, sports hall, city planning centre, exhibition and conference centre and a 10-hectare park. With a China Three Star rating (equivalent to LEED Gold) these community and cultural facilities have created and embedded an identity in this southern region of a tier three city. They have become places of attachment in an otherwise homogenous and rapidly shifting landscape. Third tier cities in China are not simply in competition for investment and growth, ultimately they are in competition for the hearts and minds of people. We must build character into place to allow our children to belong to that place. If we don’t, they will inevitably be drawn to brighter lights, and cities will be driven to eternal recruitment of a population in a transactional marketplace. Place is an anchor that, when well-articulated, cherished and loved, can drive a sustainable generational population.

A future city

Closer to home, it is generational thinking that is at the heart of the proposal for One Victoria Street. Proposed to be built on one of the tiniest sites in Melbourne’s CBD – the former Bureau of Meteorology instruments site at the eastern tip of the Royal Society of Victoria’s (RSV) home. Decibel Architecture (dB(A)) has developed a considered, integrated proposition to create a perpetual endowment fund to support and grow the work of the RSV in raising science competency for all Victorians. We have wrought solutions from the best in technology and the industrious capacity of our Victorian engineers, scientists and designers to create an iconic, cutting-edge, sustainable generator of energy, water, identity and recognition – a marker of place and identity. One Victoria Street provides the opportunity to deliver a unique sustainability legacy to the state of Victoria, not only through what will be the ‘greenest’ and most slender tower in the world, but by enabling broad and eternal support of science, of science thinking, teaching, and exploration and the consideration of our state’s future.

Within an urban environment, these ‘identity makers’ become characters within a dialogue, not simply as landmarks to navigate with, but as cultural signifiers and as social and community contributors. The architecture that seeks to tap into the participation and enthusiasm of its users is one of the keys that underlies liveability and balance in a city.

By creating projects that connect people to their place, dB(A) hopes to build the cultural collateral and awareness that keeps children, in their growth to adulthood, connected to their place. If there is a deep-seated linkage established through the creation of space and significance, of stories that can be owned and shared, then the cities
of those people will be strengthened in their ongoing sustainable, cultural, rhizomic momentum. These cities will strengthen their capacity to hold on to their people and to harness local biological diversity and ecological networks as custodians, aligning them in and on purpose.

Such cities will maintain and grow the character of their expression, so that the entire city can continue to participate in the economic and cultural conversation of the country and the planet. The future of the ground that feeds us, the air we share, the water that makes us and the deep ecology of our place in this planet depends upon it.

Decibel Architecture (dB(A)) is led by Dylan Brady, who calls himself Conductor (waves arms a lot, plays all instruments badly). Dylan’s experience and passion for architecture has fused an artistic spirit with a practical technical knowledge and he revels in the breadth and scope of Architecture as a field for investigation (a bit like Geography). As well as national projects, dB(A) is currently working on a series of significant cultural projects in South-east Asia and China, developing and spreading the aspirations and expertise of dB(A) in sustainable design and cultural architecture.