

Introduction

It was 1986. I was still a student of Civil Engineering at the University of New South Wales in Sydney. I was now struggling in a major way. It was entirely dark at the end of the tunnel.

I loved bridges - especially truss bridges. How do large long horizontal structures stay suspended using only what is essential to do so? This question had fascinated me since high school. It was in pursuit of this that I came to study at University. I was going to build amazing bridges, literally. Currently the question of how I might eat today and again tomorrow was foremost on my mind. The problem had all started with an accident. I'd broken my arm. In addition to my course load of 34hrs/week of face-to-face lectures and tutorials plus the necessary additional study and assignments etcetera, I worked for money. I had somewhat reliable work involving physically relocating offices - at the time owners generally wanted to move their offices, from Friday evening very late into the night, all day Saturday and often enough on Sunday. I was completely dependent on this casual income to pay my rent, feed myself and cover my expenses.

Now I was without that income and unable to hold a pen or pencil I could not even study effectively. Things went from bad to worse and didn't get better. Study in any case tends to take second place when you don't have any food to eat. Soon enough I was both broke and entirely unwell. Severe glandular fever disbanded my optimism of a dignified self-determination and will-power driven recovery. I would need to spend a little time on my knees.

The head of school of Civil Engineering was one Professor Ron Whitehead. Professor Whitehead in my rare sightings of him struck me in appearance as if a pilgrim fresh off the Mayflower of 1620. Alas to Professor Whitehead I did appeal my pitiful case.

Professor Whitehead delegated. He did not himself speak directly with students, at least not mere undergraduates. That was beneath his station. So through a senior staff member I was told "We [the school] can see that your grades were good before you broke your arm badly, compromising your ability to study effectively, then you became very ill for an extended period of time as has been well documented, and we have no doubt that this has resulted in extreme financial hardship for you as you say – *but*", and these were his actual words ... "if you design a bridge and it falls down and kills 50 people we cannot say those people are dead because the bridge was designed by a one armed engineer". The School of Civil Engineering at the University of New South Wales would not be providing for compassion. Period.

Twelve years had passed. It was now 1998. I was on annual leave and travelling inside a car through the Australian desert north of Broken Hill near to nowhere, but nearer the nowhere of Mutawintji than elsewhere. Mutawintji is just a place name. There's nothing there. Rocks and sand and a few thirsty struggling plants. The occasional motorised nomads like us. Also in the car were my two young daughters aged about three and seven, their mother, and a good friend and her young daughter also around seven. We had left the only remote dirt road that runs through the area and driven a long distance down a sandy track rumoured to lead to an unlikely waterhole in an unlikely canyon.

It was not supposed to be so hot yet in this part of the year, but hot it was. We found the waterhole, we went for a swim. It was a relief! But then something happened that was not supposed to happen! It started to rain. There in the middle of the hot Australian desert at the end of a long dirt track in an old small two-wheel drive car the rain tumbled down. Panic set in. At issue was that we had left our exposed camp site behind with no thought as to the possibility of rain. Rain was implausible. In the mind of one of our group it was imperative we now get back to our campsite very many kilometres away as quickly as possible. In so doing we rounded a corner in the road where the tyres of the car were guided by some ruts in the track, control was lost and the car flipped. I still remember my three-year-old daughter somehow landing on the bottom of a pile of bodies. Such things happen in slow motion.

Surprisingly nobody was much hurt. The car was however a mess. Two tyres had been forced off their rims and one rim was badly deformed, rendering the car undrivable. There was good news. The rain was abating.

I sat in silence as the other two adults began to argue. I realised that as predicaments go this was quite a pickle. The two young mothers then decided they would simply walk back towards the remote road at the end of this track with a view to getting help. I would be left with the three kids. I have no problem in assuming leadership, but this was a complex social dynamic with a history. I didn't dare argue. I was entirely unconvinced I would ever see the two of them alive again.

To my utter astonishment only about two hours later they both returned in a 4WD Land Rover also containing five adult males. It was pure chance that anyone was in the area. But this wasn't just anyone. Four of the men were brothers and they had with them their father, one Professor Ron Whitehead!

To their great credit the Whitehead's had all the necessary widgets needed to get one of the tyres back on the rim and inflated, and using the spare we were able to get the car drivable. The Whitehead's camped the night with us. Prof Ron Whitehead was now completely blind. It took a while to dawn on him that I was one of his former students.

Everyone other than Prof. Whitehead and I soon went to bed, leaving the two of us alone in the desert, alone in conversation. The conversation naturally turned to engineering. After finding the right context I was able to declare my central thesis directly to him, something I have always felt very strongly about even as an impressionable young compliant university student in the 1980's. "I believe" I said, my voice straining "that building major cities that are *by design* car dependent is just plain stupid". It seemed that I had killed the conversation. Prof. Whitehead fell silent. His head hung down. I had not meant to invoke quite this reaction. I was very pleased, delighted in fact, to see him that day. A slow death by dehydration in the company of three small bright eyed children was not appealing.

Then he spoke. It was an earnest tone. He truly meant what he was saying. "I agree" he said. The tonality, the body language, said so much more. He went on to acknowledge that he had been a part of a bad idea and he now understood this and regretted it. There lays the premise of my book. Most anything given over to 'authority' more often than not - turns out poorly. So far as cities are concerned, almost nothing in our built environment is the result of free people making free choices.

Car dependency for one thing is something that has actually been forced upon people. We've forgotten. Or we never knew. Now we don't care anyhow. Or we just don't think. Worse of all we adopt it as if it's the only possibility. Imagination is absent. This is a theme to which I shall return. So another theme of this book is that humans are self organising entities that produce better happier outcomes without epaulettes.

'Beauty is as beauty does' and just as the opposite of love is not hate but rather indifference, the opposite of beauty is usually not ugliness which is in any case hard to define but rather 'compliance' or its sibling 'deference'. And where does deference take us? One central theme of this book is that most people defer to 'authority', while authority themselves defer to aggression. Aggression wins. Authority is impotent. Civility is lost.

I clearly believe civility is on the decline and that to which I most aspire is the resurrection of civility. This will not happen as a product of compliance, nor even through respect of current manifestations of so called 'authority'.

This book is meant as a celebration of the amazing and beautiful world we inhabit. While it is a snub to the extraordinary arrogance and useless pompousness and pretentiousness borne of willing deference by way too many, I'm hoping to show the wonderful things achieved by thoughtful, earnest, modest and underappreciated people who demand no respect and exercise no 'authority'.

Just as Benjamin Franklin said 260 years ago 'Those who would give up essential Liberty, to purchase a little temporary safety, deserve neither Liberty nor Safety'. And of course nor do they get it. In deferring without questioning, without challenging, without being active in our citizenry we kill that which is most beautiful and become trapped in fear. And fear is where far too many people reside. It's become the status quo. A kind of collective paralysis.