1966 and all that: a tale of transport policy and integration in Western Australia

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Abstract:

In the beginning, there was the Act (the *Transport Co-ordination Act of 1966*) and for 35 years this guided transport policy in Western Australia. The *Act* delivered both continuity (at the 1999 ATRF in Perth, we were able to present the *Three Directors General* – apologies to Pavarotti, Domingo and Carreras – who between them had administered the Act for the first 33 years) and change (innovations such as Integrated Transport Planning – through the Metropolitan Transport Strategy – strategic bicycle planning, TravelSmart and accessible public transport for people with disabilities).

Since 2001, the situation has apparently been reversed, with continual change in administration and little innovation in policy.

This paper takes a light-hearted but inquisitive look at the past 45 years, identifying key developments that have influenced (for better or for worse) the ability to achieve useful outcomes in transport and effective integration with related areas of public policy and government.

The paper concludes that there is an apparently irresistible human urge to reshape the world in our image, collectively and individually. In such a world, public policy becomes like the rock of Sisyphus and just when we think we have reached the summit it rolls back to the valley and we start all over again. Like all who fail to learn from our own history, are we inevitably doomed to repeat it?

Introduction

This essay is formed of ten chapters, a moral and a consolation. It should be read as a whole and not in parts. Avoid the temptation to select those parts that accord with your preconceived ideas and reject the rest, as too often is the temptation we fall into when contemplating the unknown, the ineffable or the revelations of others.

Chapter 1: In the Beginning...

In the beginning, there was the Act, and it was called the *Transport Co-ordination Act (No 91 of 1966)*.

And the Act said that there shall be a Director General of Transport ... responsible, subject to the general control of the Minister, for the administration of this Act.¹

And the Director General was charged with the duty of:

- recommending to the Minister transport policy or changes in transport policy and measures for achieving policy objectives and the co-ordination of the various forms of transport service;
- overseeing the implementation of such of the policies and measures mentioned in paragraph (a) of this subsection, as may, from time to time, be approved by the Minister;
- making provision for, and supervising, research in transport planning and operation and in the economics of every form of transport;
- collating and co-ordinating capital works programmes for public transport services and justifying such expenditure thereon as is, in his opinion, warranted and recommending times for the commencement and completion of those programmes;

as well as other duties.2

And the creator of the Act saw to it that the Director General was able to do these things by granting him:

- (a) [the power to] demand and obtain from any State Government Department or agency of the Crown such information as he may require touching the operation and conduct of any transport service;
- (b) ...the powers, authority and protection of a Royal Commissioner ... to any investigation and inquiry that he may make for the purposes of this Act.

And to make the Director General's burden less unbearable, the Governor appointed an assistant and other officers necessary for the due administration of the Act (Section 25, subsection(1) of the Act as originally proclaimed).

Whereupon the Director General did scour the land and other lands across the seas for those who would support him in his functions, for his tasks were burdensome and no man hath all the necessary skills in himself. And he did gather unto him knowledgeable people to form his Office - and their number was twelve.³

And yet the twelve spake with one voice, for despite their diverse origins and knowledge, they had the guidance of the Director General and were collegiate in their practice.

¹ Section 5 of the *Transport Co-ordination Act 1966*, as originally proclaimed.

² Section 21, subsection(1) of the *Transport Co-ordination Act* 1966, as originally proclaimed.

Increased to 13 in 1977, when the present author joined the Office. This increase required the approval of the Governor-in-Council, which ironically happened on the same day a letter critical of the government, written by the present author, was published in the West Australian newspaper.

Every Friday at the appointed hour they did gather in the boardroom, wherein still resided the entrepreneurial spirit of its original inhabitant⁴, and drank wine and participated of vigorous debate on matters of the day and of the morrow.

And it came to pass that the Office of the Director General was highly regarded in the world and many followed the lead of those who worked within it.

But there lurked without a mighty dragon that breathed fire, from internal combustion, and bitumen and whose ambition and resources were seemingly without end. This dragon was worshipped by many who lay down their lives before the false idol of automobility. And when the dragon roared, strong men did tremble and make obeisance to it.

Chapter 2: Descent into Chaos

It came to pass that those who had created the Director General became impatient and said to him: "Why dost thou spend so much of thy time in policy research⁵ when thou couldst be using thy powers to save the world?"

And the Director General was struck dumb, for he saw that he <u>had</u> made a difference and that it was good, but still they did not see it.

So the Director General sought to become more relevant, so that the faith should survive, and did establish around him both those who had formerly been seen as labourers as well as those of his Office who still remained, for of the original twelve there were some who had departed for greener pastures.⁶

And so it was the 'Office' became the 'Policy Division' of the new edifice and became one with the tax collectors and bureaucrats.⁷

And as new honours and responsibilities⁸ were bestowed upon the Director General, he saw that his faith was not sufficient to withstand the cries of those outside the walls⁹ who wanted their own priests. So the Department of Transport, as the faith was now called, was restructured in the image of the world and not in its former image of ideas.

And policy was plunged deeper within the new theology and became obscured.

And so it was that 'policy' gave way to 'strategy' and then to 'planning' and to 'implementation'. And the adherents in each of the worldly elements of the Department erected towers glorifying their own part of the faith and bowed down in worship to idols with feet of clay in their silos.

Before many years had passed, the inhabitants of the silos began to speak in different tongues and were distrustful of those who were abided in a different silo. To those outside there was a babel of voices, and none could be heard clearly.

And those who were not of the faith, and who would mould the world in their own image, were able to build monuments of their own to stand for generations as visible manifestations of their power and influence.

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One Alan Bond – for the Director General had his Office on the top floor of Exchange House on St George's Terrace, where the Bond Corporation had started life.

Or 'prayer' as this was sometimes described by those without the faith, for they did not understand the method or the fruits of this work.

⁶ In one case, this literally involved 'going bush' (well, Bridgetown in Western Australia's southwest).

⁷ It was at this time that the Department of Transport was established, within the Public Service. The Office of the Director General had never been subject to the Public Service Act and its accompanying restrictions. Indeed, to be so would have been inconsistent with the powers and functions of the Director General.

⁸ For example, for matters maritime and the strategic management of metropolitan public transport.

⁹ Also known as 'customers' or, later, 'stakeholders'.

Chapter 3: Resurrection

In the dying years of the second millennium, the Department found itself without a Director General and a Regent was appointed from outside the faith and owing allegiance to none of the castes. And he saw, with the clear eye of the newcomer, that the faithful had become myopic and like unto those who existed in the parallel faith of the private sector and were worshipping at the same altars even though they understood not the creed.

And what he saw perplexed him, for did not all in the Department follow the same creed¹⁰. But then he saw that the creed was not one but many in the guise of one.

When he understood this, the Regent thundered that this must not be, and that an 'integrated transport policy' must be written as their bible. But it had been so many years since policy had been their life force that the silo-dwellers did not recognise the words and did not comprehend it.

And the world now was no longer as it had been when they retreated into the silos. So the people of the world did not see the same visions or interpret them in the same ways.

But the Regent was a compassionate man and saw that much that was within the silos was of value to his people. He did not wish to tear down that which had been built in good faith but to lead it in the direction of the common good.

And so it came to pass that, unlike Henry Ford¹¹, he saw value in the past and raised up a virtual structure to hold the silos together through the forces of integrated policy, innovation, leadership and influence.

And he engaged in this work, as architects, those who had experienced the previous manifestation as well as those who understood the new realities.

This structure he held unto himself, that it might not be torn apart or its people led into temptation by false idols or sectional interests.

He called it the Office of the Director General. And it was good.

Chapter 4: On the Nature of Policy and Prayer¹²

Since the beginning of time (or at least since the 14th Century AD, when the word came into being), it has been ordained that those who would change the order of things must engage in prayer¹³, for without it there can be no response.¹⁴

Being diligent and wishing to explain their requests, many of the faithful built their prayers around analysis¹⁵, which is the method of science. But the method of science is not the method of faith, for it concerns itself only with what we know and with knowledge of the parts and not the whole.

¹¹ Henry Ford is reputed to have said that 'history is bunk'.

4

¹⁰ The 'State Transport Policy' of 1995

Readers will be familiar with the inability of the faith-challenged to distinguish between the concepts of policy and prayer. Skimmers may wish to refer back to Chapter 2 for enlightenment.

Prayer (noun): an address (as a petition) to God or a god in word or thought Date: 14th century

In Westminster Parliamentary parlance, 'prayers' are motions put up by individuals (ie not Ministers) for adoption by the House. For example:

[&]quot;Lord Alton of Liverpool rose to move, That an humble Address be presented to Her Majesty praying that the Regulations (S.I. 1998/1833), laid before the House on 30th July, be annulled." (UK House of Lords Hansard text for 4 Nov 1998 (981104-20))

¹⁴ In the words of the Polish philosopher, Leszek Kolakowski, 'It may we be that the impossible at a given moment can become possible only by being stated at a time when it is impossible'. Quoted in Sale (1980, p519).

¹⁵ Not for nothing does 'analysis' rhyme with 'paralysis'.

Those who see not the whole but only parts of it are like unto the person with a mote in his eye, for they are blind to the richness, complexity and simplicity of the world. And the people of the world, one by one, not those who would control it, create their future by the decisions they make.

He who would have his prayers answered must know that not all things can be so, for whilst all things individually may be possible, and many are congenial to each other, yet the tensions between others are great indeed.

And yet, be not guilty of the sin of hubris, for there are more things that may co-exist in heaven and earth than ye are able to see. 18

It is the way of the world that the best-researched prayer does not always bring the greatest reward¹⁹, for those who judge are often not of the faith. If they see not God, they do not value Her and move not to be closer to Her.

For those of you who would hand the business of prayer to others, seemingly most knowledgeable in the ways of the spirit, beware lest ye lose the importance of experience. For, no matter how knowledgeable the other, he cannot learn for you and to learn at secondhand is not to learn at all.

And if you would have the support of those who follow other gods then ye must proselytise²⁰ them, not with anger or resentment but by showing them a better way to receive answers to their prayers.

And yet others profess to follow the same god but follow a different path. These must ye bring into the fold, lest they stray further and fall victim to the wolf that will dress up in their skin and merge with the flock and eat it from within.

Policy is the ultimate response to prayer, and the rest no more than a means to this end. But without prayer there can be no policy except through the prayer of others who may seek to debase the foundation of your faith.

But he who would move the (policy) mountain must be clear of purpose, see the world as it is rather than as he would have it be, seek out allies and create opportunities. But of these four, the greatest is the last, for without opportunity nothing is achieved and the remainder are all the servants of it.

In all of this, let there not be division among you, for if you are not as one others will take advantage and bring you down or reduce you in the eyes of the Creator.

There is no conflict here between 'complexity' and 'simplicity', for complex systems can often be simulated with remarkably few simple rules - for example, the flocking of birds has been very well modelled (even when random objects are placed in their path) on the basis of three simple behavioural rules.

The Transport Strategy Committee on Future Perth (1992) stated, that "the future of Perth is formed less by the grand edicts of planners and politicians than by the multitude of decisions made by people as individuals and members of organisations".

It was Mark Twain who wrote that "the reason that truth is so much stranger than fiction is that it does not have to be consistent". When writing fiction we mainly deal in what is consistent with our (limited and partial) experience (with the likely exception of James Joyce's *Ullysses*); the truth sets itself free.

The classic (almost clichéd) example is VHS and Beta video systems - the latter is generally judged to have won the technical battle but lost the marketing war. Both, of course, have now been superseded by the DVD and Blu-Ray, which wage a similar battle.

²⁰ Proselytise (verb – Date: 1679): intransitive senses

^{1:} to induce someone to convert to one's faith

^{2:} to recruit someone to join one's party, institution, or cause transitive senses: to recruit or convert especially to a new faith, institution, or cause

Chapter 5: The Book of Numbers

Once, achievement was described in narrative, and narrative was the measure of worth²¹. And history was written as description of deeds great and small, and the tales lived on in the telling for the power of story was great indeed.

Then it came to pass that achievement and narrative became seen as a close cousin to smoke and mirrors, camouflaging chicanery and double-dealing with liberal doses of snake oil, especially by those of different faiths who understood neither the liturgy nor the lexicon.

And so it came to be that achievements were supplanted by outcomes and, because outcomes were difficult to measure, they in turn were replaced by outputs.²²

So the counters of beans displaced the keepers of values; and value replaced values, which were paid no heed for they could neither be counted nor accounted for.

And yet there were those in the faith, among the acolytes, who saw that no amount of numbers could fill the yearning of the people for meaning. They saw clearly that meaning did not lie in numbers but in their interpretation, and that wisdom was lacking in the reliance on numbers.

And great was their protestation, but it was to no avail.²³

It came to be that those who understood not would not listen to the Word, but hearkened only unto the numbers; and those who were of the faith grew ever more frustrated with them. And those who were not of the faith, and listened not, became ever more angry.

Truly it has been said that: "Those who have faith, no explanation is necessary; to one without faith, no explanation is possible." Some elders of the faith did see that numbers cannot beget belief in that which is neither numeric by nature nor demonstrable by the laws of mathematics and reductionist analysis.

And yet truth in complex systems lies not in predictability nor in mathematical certainty and exactness but in the fuzziness of logic and human behaviour.²⁵ And some among them observed that: "The future is determined less by the grand edicts of planners and politicians than by the multitude of decisions made every day by individuals and businesses" (Transport Strategy Committee on Future Perth, 1992, p.i), a thought which gave birth to the new herecy called TravelSmart.

For the real world is one of fragments, potentials and probabilities, not one of wholes or of certainties. And he who does not see the trees in all their individual glory will see not the wonder and diversity of the forest but only its uniformity. If consistency is the last resort of the unimaginative, then uniformity must surely be the last resort of the unintelligent.

Chapter 6: The Towers of Babel

And the multitude of voices extended beyond the realm of transport planning, unto the kingdoms of the land use planners and the builders of transport infrastructure, who spake in a multitude of other tongues. And each kingdom erected its own tower to demonstrate its rightness and its power.

²¹ See the Annual Reports of the Director General up to the late 1980s.

Results increasingly had to be quantified and, hence, quality became replaced by quantity. As quantity replaced quality, so outputs (which <u>can</u> be quantified) replaced outcomes, which often cannot be quantified.

²³ "They would not listen, they're not listening still; perhaps they never will." Vincent (song). Don McLean

Attributed to St Thomas Aguinas, philosopher and theologian, 1225-1274.

A key characteristic of complex systems is 'emergence', by which systems can have qualities not directly traceable to the system's components, but rather to how those components interact, with those interactions themselves being probabilistic rather than deterministic.

The people were confused and demanded to know which was the true tongue. And there was a revolution through the ballot box, with those who did not see the inconsistency of their policies on land use and transport banished unto the darkness of the opposition benches in the Parliament.

And the people elected themselves a Government that preached the virtues of integration and 'whole-of-government' approaches and promised to allow the people to say how it should be judged.

And so was created the Department for Planning and Infrastructure²⁷ with but a single Minister charged with creating a common purpose and unity out of difference.

But rough was the road ahead of her (for the Minister was indeed a woman) for she took too literally the injunction to 'drive like Jehu' and was stripped of her charioteer's licence²⁸ and could no longer exhort the faithful to obey the laws of road safety. So interwoven with the laws of transport were these, that an assistant had to be assigned to assume these responsibilities.

Seeing this, the government established a *Taskforce on Machinery of Government*, which pronounced that the laws should be changed to establish road safety as a separate faith.²⁹

And the scribes of the Department did labour mightily and long to separate the laws of safety from those of transport, but were opposed by those who were truly of the integrated faith and did not support schism and by the Pharisees (and some lay people) who were knowledgable in the law.

Yet other scribes did labour to describe how the new Department should be, for the cultures were diverse. Whereas the planners saw that land use was supreme and above all, those from the transport faith saw this as idol-worship and did say "thou shalt not raise up false gods and worship them", for is it not land use planning that fails to deliver jobs where the people need them and causes daily mass migrations that sorely test the ability of our transport systems to nourish them.

Chapter 7: Exodus

While the priests were looking to the catechism for the new faith³¹, there arose a discontent among the faithful. And that discontent did afflict both those who had been long of the old faith and were loth to accept change but even more among those who were zealots of the new faith and saw that it was being made in impure form.

And there arose from the central agencies of government a bounty to maintain the exclusive nature of the priesthood in the public service. And many of those to whom corruption of the true faith was anathema did depart, even unto the target number of sixty.

The counters of beans³² saw that this was good and did devise a temptation to heretics and

²⁶ This, at least, sounded less unsophisticated than Tony Blair's 'joined-up government' in the UK.

²⁷ Originally, the intention was to call it the 'Department Of Planning and Infrastructure', until someone pointed out the unfortunate acronym.

²⁸ Memo to the Commissioner for Main Roads: Perhaps the road was not rough enough, as a rough road would surely have forced the Minister to travel more slowly.

²⁹ Curiously, the Chair of the Machinery of Government Taskforce had previously been the prime mover in achieving integration of transport and road safety, which was achieved through a legislative requirement that the same Minister be responsible for both.

³⁰ Some said the cultures were incompatible and that this was one reason for the plague that led to the Exodus (Chapter 7, qv).

³¹ In theory, anyway. To the outside world, it often looked that the Tower of Babel was alive and well but with a different name.

Not Miss Maud, whose 'coffee bean polls' have outperformed more sophisticated (and much more costly) public opinion polls at many WA and Australian elections.

lesser mortals to depart the Church. And this temptation was greatest for those who had learned most and whose knowledge and wisdom was most prized by those of the alternative faith of the private sector.³³

And so it was that there was an exodus of people with skills and knowledge, many unto the private sector world of consulting from whence they would be often recalled to advise on aspects of the law.

Chapter 8: The High Priest(ess)

And so it was that the Temple of Planning and Infrastructure³⁴ came took earthly form. But it was not as it should be. And the Minister, or High Priestess as she became, saw that that it was not as it should be and that those who professed integration did not act as she wished and that integration was still a far dream not an emerging reality.

She did chastise her priests for this and exhort them to lead by example, but still they did not. And she did bemoan unto a gathering of doctors and other learned men and women from the universities in her audience chamber that the Temple did not. And the doctors and learned men and women were sorely perplexed for they saw the truth of integration and resolved to build a new temple of learning, dedicated to conjoining the mysteries of land use and transport, to be known as PATREC³⁵.

The High Priestess saw that a Chief Priest was to be found to lead the faithful into the promised land. And she called for those who would aspire to this challenge to submit themselves to question and ordeal, so that she might anoint a leader who would take his³⁶ people into the promised land. But those who sought favour were found wanting and she did call again, unto the four corners of the nation, for a leader.

And, Lo!, a Chief Priest was found among the chiefs of the lesser governments of the realm and we shall call him Captain Ahab for he came from the tribe of Melville, which had been wont to argue vehemently with the High Priestess about whether the miracle of the disappearing ByPass³⁷ was indeed a miracle or was a great white whale that would unleash plagues of heavy trucks on the people of Melville.³⁸

Chapter 9: The Roar is Muffled

And so it came to be that the tribes were united under the Priest from the tribe of Melville. At least, this was as the outside world was supposed to see.

³³ It seemed that little, if anything, had been learned from previous downsizing initiatives, for example at Main Roads WA and at the WAGR. In 1983, Victorian Railways offered a similar 'voluntary redundancy' scheme to staff, with the stated intention of cutting down on unproductive operational staff, many of whom were in country areas. Of course, people in the country had little (if any) alternative employment and take-up was low. However, 13 of the 14 top executives are believed to have departed under this scheme.

It is purely coincidental (and not noticed by the author until after he had written it!) that the TLA for 'Temple of Planning and Infrastructure' is the same as for 'Totally and Permanently Incapacitated'.

³⁵ Planning and Transport Research Centre, a joint initiative of the four public universities in Perth (www.patrec.org).

³⁶ Or 'her' people, but neither transport nor planning has much of a history of female participation above middle management

The Fremantle Eastern ByPass was a road even more contentious than the Perth City Northern ByPass (eventually incarnated as the Graham Farmer Freeway, but kept out of sight of the people of that fair city so that they could still build their houses where it was). The City Northern ByPass succeeded by being built underground (Ker, 2009) and help being given to those who walk, ride bicycles or use public transport. Why this solution was not offered to the people of Fremantle has never been explained.

Possibly a case of "keep your friends close...and your enemies closer" (Sun-tzu, Chinese general & military strategist, c400 BC)

But this unity of purpose came at a high price. Differences and debates that had characterised the land of Australis Occidentalis since time immemorial³⁹ were stilled. The laity were no longer to hear dissenting voices as the priests kept a tight rein on them so that the faith would be unsullied by heresy or dissent.

Even the 'great roar' of thousands at the Fremantle Passenger Terminal, that brought forth the tablets of stone to be called *Network City*, was regarded with suspicion by some who saw the hand of the High Priestess too clearly in its commandments.

And so, as so often is the way, lack of dissent and debate bred orthodoxy. Although such orthodoxy was not without its critics, these were outside the faith and their views were not to be uttered within the hallowed walls.

Chapter 10: Schism

All things come to an end on this mortal coil, and the Premier of the day, who thought himself first, but not amongst equals, did call for a vote of confidence in his Government from the people of the land.

And, despite his having made them all equal in the eyes of the Electoral Commissioner, the people rebelled, punishing him for his arrogance, and the forces of conservatism did gain the ascendancy in the halls of the Parliament.

That which was tainted as the creation of the previous faith was cast asunder: sometimes in name and sometimes in fact.

And so it came to pass that TPI no longer was the Temple of Planning and Infrastructure but became 'Terminally and Permanently Incapacitated', and a great schism ensued.

Chapter 11: The Moral of this Story

The moral of this story is a salutary one for all who profess to be planners – of land use, of transport, of anything.

As Robert Burns (1785) wrote: The best-laid schemes o' mice an' men gang aft agley.

Or John Lennon (1980): Life is what happens to you while you're busy making other plans.

When we plan, it behoves us to be humble and reflect on the fact that all plans are forecasts – and all forecasts are wrong because the act of making the forecast changes the behaviour of those who influence the world. Forecasters should strive to be approximately right, rather than precisely wrong. Stick to the big picture.

As Albert Einstein suggested: everything should be made as simple as possible, but not simpler.

Cities and states are complex systems, but this does not mean we should see them as more complicated than necessary. A cornerstone of complexity is that the interaction of simple 'rules' can lead not only to complex outcomes but to unexpected ones – emergence.

We should not be surprised that the future is formed less by the grand edicts of planners or politicians than by the multitude of decisions made by people as individuals and as members of organizations (Transport Strategy Committee on Future Perth, 1992, p.1). Yet somehow we contrive, more often than not, to forget or ignore the self-evident.

³⁹ Well, at least since 1966, nearly 40 years previously, which was well before the memory of those who now abided in the twin towers of the new faith.

Chapter 12: Consolation

W C Sellar and R J Yeatman (1960), the authors of *1066 And All That*, introduced their opus thus:

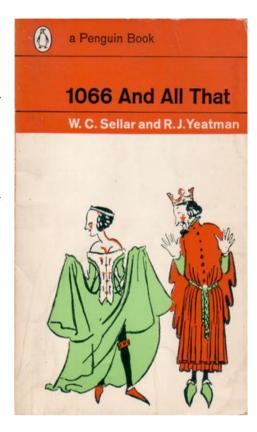
Histories have previously been written with the object of exalting their authors. The object of this history is to console the reader.

So where, dear reader, is the consolation in this tale?

It lies, dear friends, in the impermanence of all things mundane. For in impermanence lie the seeds of change. If you do not like the status quo, wait awhile and it will be recast.

The wheel will be reinvented again (and that is not a tautology), in many shapes and forms – some might even be round, but many will not.⁴¹ Somehow it will turn incessantly – in circles – in spirals – in ever-decreasing circles – randomly – never resting, for this wheel has become the rock of many a modern-day Sisyphus – somehow being pushed to the summit by their efforts only to roll back down again.

No, dear reader, Sellar and Yeatman were <u>not</u> right when they said *history is now at an end*.



Like all who fail to learn from our own history, we are doomed to repeat it (Santayana, 1905).

References

Burns, R (1785). *To A Mouse, On Turning Her Up In Her Nest With The Plough*. http://www.robertburns.org/works/75.shtml

Ker I (2009). Shaping Northbridge: Roads, Rails and a Sense of Place. 3rd Northbridge History Studies Day, 24 May, 2009: Perth, Western Australia.

Lennon J (1980). Beautiful Boy. Double Fantasy album. Geffen Records: Los Angeles, USA.

Waldrop M M (1992). Complexity: The emerging science at the edge of order and chaos. Simon & Schuster: New York.

Sale K (1980). Human Scale. Coward, McCann and Geoghegan: New York, USA.

Santayana G (1905). The Life of Reason, Vol. I, Reason in Common Sense. Charles Scribner: New York.

Sellar W C and Yeatman R J (1960). *1066 And All That*. Penguin Books: London, England. Originally published by Methuen and Co: London, England, in 1930.

Transport Strategy Committee on Future Perth (1992). *Transporting Perth into the 21st Century: People, Plans and Posterity*. Final report of the Transport Strategy Committee on Future Perth, Department of Transport: Perth, Western Australia.

⁴⁰ Mundane in the sense of 'pertaining to this world or earth as contrasted with heaven', not, I hope, in the sense of 'common; ordinary; banal; unimaginative'.

⁴¹ Indeed, not all wheels should be round. My bicycle has a chain wheel that is elliptical, which greatly reduces the effort needed to propel the bike, especially up hills. An elliptical chain wheel effectively puts the bicycle in a higher gear when the rider is able to place the greatest force onto the pedals and a lower gear at other times.