

Cultural Futures in an Age of Digital Disruption

2015 Geoffrey Bolton Lecture

Government House Ballroom, St George's Terrace, Perth

Tuesday 6 October 2015

We are gathered tonight on the traditional lands of the Wadjuk Noongah people and I would like to acknowledge them as the traditional owners. I pay my respects to their Elders past and present and to the Elders of other communities in Australia.

As an Australian I value the opportunity to acknowledge country as a simple act of reconciliation. I trust that the acknowledgement and respect it invokes resonates with many here today. History matters. Symbols matter. Especially in a lecture named after Geoffrey Bolton and sponsored by the official State Records Office— a vital repository of centrally important material to the history of WA.

Tribute to Geoffrey Bolton

It is a privilege to be giving this lecture named in honour of the great West Australian, the fine historian Geoffrey Bolton. Sadly he passed away in early September. I offer my heartfelt condolences to his family, friends and colleagues.

It is impossible to convey the depth of my personal regret in not having the opportunity to meet Professor Bolton tonight. I have been looking forward to that encounter since the invitation from the State Archivist, Cathrin Cassarchis arrived back in March. In fact one of the major incentives to prepare and present this lecture was to have dinner with Geoffrey Bolton afterwards, as I have long admired him. I felt I partly knew Geoffrey Bolton from his wonderful enthusiasm reflected in his fluent writing style, rich with clever wit. He was also what I might term a 'radio friend', from his many interviews, commentaries and the terrific 1992 Boyer Lectures: *A View from the Edge – An Australian Stocktaking*.

Bolton's lifelong dedication as a teacher and historian was reflected in a commitment to the study of Western Australia - its institutions and individuals - seen in such great works as *Land of Vision and Mirage; A Fine Country to Starve In; Claremont, a history* and in the superb biography of *Paul Hasluck*. Of course his interest and motivations were much wider as seen in the authoritative biography of *Edmund Barton (The One Man for the Job)* and his splendid 5th volume of *The Oxford History of Australia* – entitled *The Middle Way* which covered the period from 1942 up until the mid-90s. His was a contribution of distinction and we are all better for his scholarship and his thoughtful perspective which was offered generously and above all accessibly. His was a writing style to admire, indeed to envy.

In fact I am sure that the distinguished array of previous speakers including such remarkable Australians as Brendan Nelson, Fred Chaney, Lyn Beazley, Marcia Langton, Robyn Williams and Michael Kirby testifies to a sense of obligation to accept an invitation named in his honour. Their diverse presentations have been consistent with Professor Bolton's exemplary high standards and his remarkable generosity of spirit.

Without wishing to offer an extravagant assumption, I feel in part a soul mate of Geoffrey Bolton. I share a similar insatiable curiosity about Australia, the world and in a variety of subject domains.

I see curiosity as the crucible of all cultural progress. The need to find out, understand and explain defines many of the most important moments in the evolution of civilisation. Much of that process has at its core the fundamental importance of formal instruction and informal counsel from teachers and mentors. Geoffrey Bolton was an Australian Elder in the very best sense of the term. Elder is I suggest, a concept we need to embrace in our society very much more vigorously. Geoffrey Bolton was an Elder - a wise man imbued with deep knowledge, uncanny insight and an invaluable capacity to 'connect the dots' and communicate effortlessly. He will be missed.

Digital Disruption and the Public Academy

The spirit of Geoffrey Bolton permeates tonight's occasion as do the thought-provoking orations of my eleven predecessors.

I have chosen to speak about 'Cultural Futures in an Age of Digital Disruption'. I think it might have been a stimulating topic for Professor Bolton as many here tonight by virtue of their positions and devotions, represent what I might describe as strands of the 'public academy'. A public academy which has a vital role as never before, in responding to radical new methodologies which provide very real challenges.

Tonight I will offer some thoughts on the key elements of digital disruption and provide some views on common challenges with policy formulation and the unpredictable time in which we live. I also will offer observations on future trends and some suggestions as to necessary actions. As this oration coincides with my self-imposed 'Year without PowerPoint' there are no slides – just a prepared text to stimulate thinking.

We are all experiencing what can only be described as the huge confrontational components which follow from the pervasive nature and velocity of contemporary change. These elements invariably arise from thoroughly changed behaviours and expectations which follow from the application of digital technologies. These forceful changes require adaptive ingenuity and the need to change organisational cultures ground up if we are to sustain real understanding in the world generally and definitely in the extended 'public academy.'

People often say the world is changing. I think this misses the point. The world is not changing – it has changed. Forever. We have witnessed the largest power transfer in human history. I refer to the unprecedented transfer of power from producers to consumers, or as I prefer, citizens. The significance of this shift is difficult to exaggerate. Impossible to stop.

Those who ignore the essential elements of that change where citizens are now increasingly in charge, are destined to fail. Those who enter this new environment openly with a determination to adjust and adapt have the best opportunity to prosper. Many will create remarkable opportunities, central to society's future because they understand the need to ensure a refashioned work and thought ecosystem. One

which comprehends societal empowerment and widespread connectivity which has changed the way the world thinks and behaves. They recognise the need to ensure the right cultural settings which will drive innovation, drawing from its central life force and developing mindsets and thought processes which are fit for purpose in an often bewildering time.

Meeting these potent forces which demand reconfiguration in society is not easy. Relevant responses with new approaches are essential to driving sustainable futures. The impact in the public and private sectors are equally massive.

All strands of endeavour are about to see turbulence as never before. The effect on politics and direction of governments is presently unclear. However dramatic change is everywhere as reflected in wholly different commercial and social operating models and in people's behavioural responses. The game has changed.

Innovation – An Ecosystem for Managing Change

The chief subject, as it has been over the internet's twenty year life central to digital disruption, is innovation.

Innovation is something we talk a lot about in Australia, and spend a lot of money on – over \$1000 per person on research and development. There is now an added imperative as innovation is central to responding adeptly to the dramatic change in all sectors of the economy.

Managed programs of innovation in Australia have an uneven history in effectiveness – one which is often, process obsessive but outcome poor. Regrettably reflecting a regular pattern of experience in modern Australian life.

In today's world disintermediation is the name of the game. Disintermediation is a long word with a simple meaning – it means the reduction in the use of intermediaries in transactions between producers and consumers. It is central to innovation. Technology is driving disintermediation in all things – the possibilities are endless whether in delivering goods and services commercially, in education and not-for-profit bodies, or in the processes and culture of government.

I have recently revisited the insightful observations of Brian Arthur from several years ago. Arthur – a Silicon Valley economist and researcher – is a pioneer in complexity theory. He has written about the dynamic impact of digital change with remarkable insight.

Arthur asked us to consider what happens when you book in to catch a plane. He pointed out that from the moment you stick your frequent flyer card into that gleaming machine to get your ticket, 'you are starting a huge conversation conducted entirely among machines'.

As Arthur evocatively wrote, 'Once your name is recognised, computers are checking your flight status with the airline, your past travel history, your name with customs; your seat choice, your frequent flyer status and your access to lounges. This unseen, underground conversation is happening among multiple servers talking to other servers, talking through satellites, that are talking to computers and checking

with passport control, with foreign immigration, with the security services and with on-going connecting flights. And to make sure that the aircraft's weight distribution is fine, the machines are also starting to adjust the passenger count and the distributed seating."

Arthur said that "another economy—a second economy—of all these digitized business processes conversing, executing, and triggering further actions is silently forming alongside the physical economy."

The implications? This second economy is entirely automated and already powers the physical economy. It's contributed massively to productivity growth since the 1990s. It will go further. The second economy has grown quickly and has probably overtaken the size of the physical economy already.

He convincingly argues this may well amount to the biggest change ever. It is bigger than the Industrial Revolution providing a deep qualitative change that introduces intelligent, automatic responses to the daily operation of society.

As automation is guaranteed the implications for work have not been resolved and many signs offer some measure of alarm as to where and how workplaces and work profiles will evolve. New rules are being written with responses to the dramatic challenges in the operation of society in planning, labour, investment, retirement, healthcare, communication and more.

In parallel with the relentless rise in the impact of technology are three other equally remarkable societal forces at work: – ever increasing urbanisation; the rising challenge of aging; and the changed landscape from globalisation in the movement of people, finance, trade and data sharing on an unparalleled scale.

Some Future Predictions

Making future predictions is always a risky business. The famous futurist George Gilder in the 1990s predicted the death of television before the start of the 21st Century. A bold effort with a messy outcome for him. But all he really did was get the timing wrong – TV as we know it, will change over the next decade, and probably much sooner. No doubt about it. It is happening now.

So at the risk of getting the timing or other elements wrong, here are just some of my firm predictions as to central elements in our digitally empowered future and the impact from those great change forces on our societal culture:

- The strong trend in power transfer to consumers will accelerate.
- Consumers will continue to channel trust with their friends and online communities of strangers before they trust traditional authorities and commentators or even well established brands. This is of immense import for commerce and politics equally.
- Break up and fusion in many things will accelerate where the outcomes will be unpredictable – the only constant will be the certainty of relentless innovation dictating the necessity or inevitability of transformational change.

- With so few barriers to entry in a digital world, the cost of failure has never been lower because the cost of innovation, never lower, will continue to decline. This is crucial representing a massive change especially for incumbent businesses as previous protections are eroded progressively.
- There is a stark reality seen where, whilst growth in consumer devotion and commercial activity is all digitally derived, from a content and services perspective - other than for a few stand out models in employment, travel, real estate and car sales - there is still a fascinating process of trial and error in play.
- Many sustainable commercial content models are still unresolved. However as they are worked out, much commercial carnage will follow, ensuring these will continue as choppy, uncertain times.
- Which means that the turbulence and speed of change, the disruption and breakup central to digital life is going to be with governments, business operators and investors for a long time because upheaval and all its, in many ways, messy impacts has only just begun. This will require creativity and agility to succeed with the broad community and with the myriad niches in society.
- As part of this turbulent process technology will continue to become an almost genetic extension of ourselves. Touch, gesture and voice commands are all becoming second nature in modern product constructs embedding technology patterns and personalities from the youngest age. The technology is now an embedded part of most of us and for teenagers almost core to their being.
- The new cultural paradigm is that if I can imagine it, it simply has to be there – I just have to find it (or invent it myself). Now that is a truly weighty reset in thinking!
- We will continue to see increasing consolidation in markets and ferociously heightened competition internationally where technology smarts define both the field of battle and success on it
- Equally importantly, notwithstanding the unpredictability and insecurity such turbulent change and consolidation generates, the opportunities will be bigger and often more interesting. Change is a given but the liberation to human ingenuity with this era of inventiveness unleashed and the opportunities it affords, is central to our future. And remember the journey is still in its infancy.
- Network speeds and the ubiquitous connectivity from wireline and wireless technologies will increase relentlessly. Huge network speed and capacity expansion will be matched with ever more sophisticated software tools empowering astonishing change in the way in which we produce, manage, store, deliver and consume information and use new digital products.
- A central element on which there can be little debate is that mobile technology and allied software will continue to rise, and rule, ensuring ubiquitous software as the dominant change force.
- Consumers now expect mobile devices to become the central controllers for other devices and services in their lives. The handy 'computer in your pocket' will rule the day with ever better functionality.

- Consumers will demand that a wider variety of devices work together harmoniously and seamlessly. Moreover they will want them to work together in ways that change fundamentally how they consume and interact with content and a vast array of life services. In fact they now almost expect the technology to know them and anticipate their wants and needs.
- Large international software players who innovate for a living will offer a stunningly wider range of products and content services, through worldwide distribution management where geographic separation will become ever less relevant.
- Nations and their legal frameworks may over time, be substantially bypassed in this process. The impact of this huge disintermediation has not yet been examined or really understood, especially by governments.
- New players and on-line providers will continue to grow and enter the Australian marketplace which will be remarkably vulnerable if it doesn't change the game as it operates currently. We attach too much virtue and benefit to incumbency. It means many large players are unusually vulnerable because they have the wrong cultural settings often from protection, with an incapacity to respond swiftly and with requisite, confident agility.
- In this connected world societies which don't achieve consistent productivity improvement will experience unusually harsh declines in living standards with competitive advantage vanishing quickly.
- The nature of work will change profoundly with fresh collaborative models, cross border alliances and previously un contemplated cross border talent interchanges reflecting a never ending demand to adopt and adapt to new delivery modalities.
- Cities will continue to grow and will depend on the quality of their technology sophistication and application to maintain agreeable, competitive amenity, central to efficient work and social harmony.
- Education which has to date been one of the slowest respondents to change, will be revolutionised. Parents will demand new performance and efficient delivery standards in primary and secondary levels. The flow of talent and teaching around the world will quicken as will truly tough comparative assessment. Tertiary institutions will be judged ruthlessly across geographies with striking force by students, employers and commentators equally.
- The digital divide will be very real and will expand with the fresh irony that the wonder of all that is available will also see a new information 'dark age' for many who will be locked out.
- Without determined action by government cohorts of education advantage and disadvantage will expand with severe social consequences as to equity, aspiration and direction.
- There will be a lightning speed in uptake of increasingly intelligent software tools with advanced learning capacity and omnipotent automation. Machine to machine conversations will be central to society. M2M will be as common a term as B2B and B2C are today.

- The advances in data science and analysis by statisticians will continue to prove astounding. Developments in data collection, storage and analysis – known collectively as ‘big data’ – will transform business and consumer horizons with the best known use being in ever better refined search and new flexible organisational stacked frameworks.
- The autonomous autarchies enabled from the internet and search algorithms already enable a self-organisation capacity which will continue to provide one of the most independent potent forces into uncharted territory. It will be a force for good and bad equally, substantially outside traditional supervision controls of governments.
- The application of search in all things from jokes to physics; real estate to recipes; employment to games means that people will think and react very differently. After all algorithm has become common place in daily vocabulary.
- The phenomenon of that post 1981 generation – Gen Y or the "millennials" depending on your preference – already sees a large ‘instant expert’ community which has a different attitude to self, work, play and interaction. This generation will need to be better understood if one is to productively engage commercially, politically, creatively and in creating durable attractive employment and social environments.
- Fundamentally central to this new world is the augmented power of social media, based increasingly on mobility extending into active consumer directive engagement with new products and services. Other technologies we have even yet to know we want will rise powerfully. Remember that American millennials already spend over 5 ½ hours with social media daily. They check their phones at least 50 times a day and 82% sleep with their phones on!
- And of course the ‘instant expert’, now an established part of digital social life, will become even more irksomely pervasive!
- The interconnected nature of that generation arising from social media and constant digital engagement will see travel increase powerfully with huge social impacts in a large number of countries affecting life partnerships, immigration, health, infrastructure, education, security and in countless other ways.
- The implications for defence priorities in military deployment and technology potentials will be in a realm which would make H G Wells, John Le Carre and Neal Stevenson gasp in disbelief.
- Personalised medicine and the field of genomics mapping from birth will be matter of fact realities transforming healthcare delivery. Healthcare will see a flip where it will become more about wellness management than sickness care. We are all going to live a heck of a lot longer!
- The implications of all this are immense – for example take just two examples – driverless cars and personalised medicine with its genetic intelligence and pharmacogenomics in delivery. Both will result in new found marvels in efficient operation and a wealth of new possibilities for the quality of life, if the opportunities are seized.
- The consequences for such issues as the retirement age, retirement income planning and future healthcare management are only now starting to be seriously

discussed and scoped. The intergenerational issues which arise are really very complex.

- From all of these changes we will continue to see changes in our political systems and the way we relate to each other as fellow citizens. Who knows where that will take us all culturally but the implications are quite mind shifting as they go into uncharted territory?

Does it all reflect a strange amalgam between the writings of J G Ballard, Phillip K Dick, Aldous Huxley, Carl Sagan, Isaac Asimov and George Orwell? Does this all seem remarkably dystopian or will it offer new horizons of wonder, optimism and social improvement? Truthfully the answers are probably yes and no in equal parts. However it is clear that disengagement is not a realistic option. All these things will happen.

We are up for a fascinating, albeit compulsory, ride. One which will have ever increasing speed with the necessity of adoption of and adaptation to the digital disruption settings at the centre.

Change and Cultural Institutions

Let me turn to the processes which command our attention and the themes I would observe are central to the experience of it. They reflect the phenomenon of what I would term 'the new normal' - one demanding reimagined cultural responses.

Culture here may be seen on two parallel sides – the first as that of the personality of our work and home lives and the spirit which is reflected in the way we manage, decide, communicate, share and interact. The second is of course that which reflects the total outputs and delivered creative products in our society – in other words those things that make up 'capital C' Culture.

The notion of periods of stability and static movement followed by modest incremental change or bursts of invention have vanished. The evidence of this revolution is everywhere. Incrementalism is an historical facet of 20th century culture - not of now!

We see it in the changing consumption and interaction habits driven by digital technology. Think of how you graze the world and buy things now compared with your parents. Imagine what will happen with all the key services and goods you will consume in fifteen years' time – there will be little resemblance with today. I am sure you will all have your own examples of this change. But few of you would disagree that it's upon us like a hurricane.

In all this turbulence many of our most prominent 'capital C' Cultural institutions confront issues of how to sustain relevance. More importantly they must confront an enemy which provides a fascinating paradox in such an information rich age. I refer here to what I would describe as the unwavering march of 'the general ignorance.'

Our great cultural institutions: and here I refer to our universities, museums, galleries, archives and state libraries and their parallels in the performing arts; although our parliaments and courts are equally affected; – now operate in a

perplexing context frequently. They can however, if purposefully renewed in applying resources imaginatively, confront this fascinating feature of modern society. I suggest the challenge is to confront the march of 'general ignorance' directly. A head on direct knowledge and communication attack on growing public ignorance.

Many here may be thinking given my preamble about change – what planet is he on? Where is he coming from?

What is he referring to in the march of ignorance– doesn't he know the internet pervades our very being? Isn't he aware of social media and its ubiquity?

Doesn't he realise that Wikipedia provides almost five million articles as compared with 100,000 in the last edition of the Britannica in 2010? Which is 50 times the size of Britannica and leaving aside the commercial and ephemeral silly stuff in Wikipedia it is seriously a much more substantial diverse and open source than the Britannica ever was – doesn't he get it?

Doesn't he know that Wikipedia even includes independent articles reviewing its own performance - comparing its accuracy with others and offering numerous citations as to its fairness on many indicators?

Doesn't he know Twitter and Facebook rule?

Doesn't he know about the 'Appocracy' in which we live with Pinterest, Instagram, What's App, Snapchat and many others?

Then there are Yahoo, Bing and of course almighty Google uniting and linking us all in a knowledge economy which shares endlessly – where is he at?

I say in response Yes. Yes. Yes I do know all of that. And I would say it provides the essential challenge. A challenge for all public institutions. And particularly for our great collecting and education institutions – our museums, galleries, universities and the great archives and libraries of our nation in the year 2015 and beyond. A challenge which is both confronting and healthy, a challenge with many component parts.

Part of the challenge is seen where the instant expert I mentioned earlier, presents unusually confident views on a daily basis.

The challenge where she or he is empowered with remarkable resources as never before, invariably from the friendly omnipresent 'computer in your pocket' with immediate access to so much, some would argue virtually all, of the world's accumulated knowledge.

But and it is a very big B U T, so often the reception of that information is absent the discipline of listening, analysing, synthesising and assessing in terms of context, relevance, perspective and the necessary scepticism which conditions all good, disciplined thought. Disciplined thought which provides the bedrock of clear thinking and good learning.

All too often it is also absent the inherent insatiable curiosity which drives real evolution and improvement in thought, teaching and learning which is core to knowledge acquisition, review and transfer for humanity.

Curiosity and its valuable, or rather essential partner, scepticism are frequently absent in the search for that immediate answer and the opportunity to present an instant technology facilitated opinion.

The notion of wisdom was described by the great American historian Barbara Tuchmann in her masterwork *The March of Folly*, as representing 'the exercise of judgement acting on experience, common sense and available information'. Such wisdom is absent in too much modern discourse. Elders provide wisdom and we need to elevate their role and use.

We live in a bizarre netherworld where narcissism increasingly rises. A netherworld where citizens feel unconstrained in offering opinions, often extraordinarily firm confident ones, with alarming assertiveness on the altar of nothing more than their own 'feelings.' As we saw it termed in the endearing film *The Castle* – the all-important "vibe".

Often opinions are landed with no more perspective than a single often anonymous source on any diversity of subjects without regard to perspective, alternate propositions and in blind disregard for the time taken to learn, think, test, listen, refine and then finally offer a thoughtful response. This was usually in the past seen as essential to the process of providing 'worthy opinion' which followed from an important but increasingly challenged skill - 'deep thinking'.

Here reposes a core challenge to our Cultural institutions – how do we refashion institutions to respond in ways that unite people with the glory of knowledge and study afresh, in a way which is imbued with humility, respect for thought, and with an enduring sense of wonder?

Cultural leadership in a digital era has many very real continuing tests. The audience has many distractions not the least of which is the self-obsession of many – especially where evidence from various studies reveals really substantial increases in personal assertiveness, self-importance and narcissism.

There is a clear current cultural shift focusing on the self to the detriment of community – a compelling recent book on this subject was Anne Manne's *The Life of I: the New Culture of Narcissism*. Also read Nick Carr's salutary *The Shallows: What the Internet Is Doing to Our Brains* in order to ponder the impact of modern technology to the way in which we read, process information and think .

I think it means that for healthy social connection and deep thinking to survive new resourceful skillsets are required in a context where there are so many increasingly fuzzy and diffuse signals.

Digital chemistry and personality permeates all communication, documentation, exhibition and engagement in the 21st century. It provides a central methodology for

access as we have never seen it. Change is demanded to ensure we manage the journey liberated in using these new digital tools, well.

However the core logic, intelligence and imagination informing that process have to come from the settings of history. Our great institutions need to rethink ways which reinvent their audience relationship, understand the gravity of the challenge and respond coherently. The Cultural institutions need to attract the community afresh.

I would suggest they must offer a thought challenge which is creative and often provocative if they are to liberate connections to their collections effectively. They need to reveal the imagination contained in their collections geared to stimulating renewed pathways to deep thinking.

If we care about history and love our collections and the people who made the documents, paintings, books, sculptures, maps, manuscripts, objects, stories, studies, science and tools that inform them, then we owe them the continuing honour of rethinking the challenge of sustained community connection. The same applies to the performing arts and the great canon of theatre and music and the quality of renewal in its audience connection. This applies equally to the great institutions of society – our parliaments and courts.

On all sides the connection challenge must be accepted clearly. It must avoid being condescending and must energetically celebrate the journey itself. Because apart from the joy of discovery, learning and revelation; we have big issues to address.

We live in an era of conundrums. It is often said that volatility, uncertainty, complexity and ambiguity are the bywords for the current era. *The Economist* has in the inevitable way of things provided a new acronym for it - VUCA - in the excellent short monograph, *Frugal Innovation*.

One of many cultural challenges in this age of digital disruption seems to me to repose in how we martial the amazing resources of the institutions and collections of the nation – individually and generally – to ensure that responses provide stability, confidence, simplicity and clarity in sharing knowledge, creativity and the power of informed thought and learning, to our future.

The Core Policy Challenge

At its heart is the essential element missing in so much of the digital domain – a sense of refashioned contemporary citizenship; digital citizenship. It is a complex topic with many strands. At core I would suggest is the need to restore the value in the community's relationship with humanity's achievements. A devotion to history, creativity and discovery is central to cultural renewal and outlook. A sense of the human and national narrative is core to a confident sense of self and place.

It demands a renewal in the sense of wonder at the journey liberated to us all by using amazing new digital tools. A new toolkit is needed with different approaches to curation, research, planning, and teaching.

It also requires new behavioural respect and training to address the rampant IP theft seen in the digital world which is so corrosive of society's ethical heart. This is long overdue for concentrated corrective attention.

A reinvigorated pledge is called for with a devotion to a new digital consciousness in managing learning in the service of stimulating public curiosity and inquiry about our past so as to inform our future. How to sustain discipline and thoughtful review as part of the process is a key question. It is certainly key to government looking forward to horizons two or three decades hence in planning responses which address these colossal forces effectively in the interests of our society – our commonwealth.

Many institutions have the burden of being incumbents in this era of endless disruption where the consequential impact arising from the turbulence of many of the processes we are experiencing can cloud judgement and alter perception as to key trends and directions. For many, adjustment is confronting. It requires renovated governance approaches that accept risks, back talent and are structurally focused on outcomes and not on processes for the own sake.

It seems clear to me that our society is increasingly governed by several sustained characteristics, which are each profoundly unhelpful to committed improvement and clear direction in national public policy formulation – especially for those institutions dedicated to intellectual and creative life. Consequently that much abused term, the public interest, is serially disrespected.

We see this particularly as money is treated as the measure of value in all things rather than as one of many measures.

We see it in lowered priorities from some in power through neglect and disengagement, in not seeing creativity and intellect as the vital crucibles of the national future.

We see it in commentators often being unable to disconnect discussion of science and the humanities from rigid ideological positions and often indulgent ranting. And we see it in society generally adopting a perilous course to celebrate the anti-intellectual and the triumph of what I have referred to as 'the general ignorance' over considered respectful debate which aims to test ideas and assumptions so as to arrive at evidence supported outcomes that will last.

These forces are readily apparent in their impact on science and the humanities and their ability to deliver empowered creative innovation. Support has declined, policies are malformed on the altar of populism and 'dumbing down' to an ever lower common denominator. Short term devotion rules the policy and resourcing day.

An allied fearsome trend rejects considered knowledge based debate, replacing it with dogmatic assertion. I would describe this process as the 'infantilisation' of Australian cultural and science policy.

Unless a different, informed, caring and activist policy stand is adopted then stagnation, declining education standards and a marked talent drain will inevitably

result. Without early correction we will have a poorer society and it will become ever harder to rebound in a digitally empowered era. We will all be failing if these issues are not confronted with imagination, logic and I would suggest, a decent measure of passion.

In the 21st century a society, which loses contact with and commitment to respecting, celebrating and appropriately resourcing science and the humanities will decay. It will drift off into a mindless haze of paralysis and irrelevance.

The task before Cultural institutions is to ignite the community in the service of what genuinely constitutes the long term public interest - a loving respect for and refashioned celebration of curiosity, knowledge, creativity and learning. They have to do that as a simple assertion of their reason for being. Frankly we need to equip the nation with the intellectual resilience to succeed in an era of endless rapid disruption. We need that governing theme to ensure we provide independent ramparts to our policy future.

The performing arts, our galleries and museums and our education system central to their health are from too many assessments, in real decline. Resourcing is compromised and performance standards are dropping. We see performing arts centres and companies, museums and galleries constantly having to confine and contain the innovation and renewal in thinking so central to a vital culture because they are often consumed with tendering to basic survival. In fairness they are also too often mired in outdated, inefficient approaches which scream for reform.

There are problems across the board but the solutions are in the institutions' hands. It requires fresh thinking and cooperative action – with each other, with government and with a firm focus on their most important client – the community in all its rich array of interests from scholars to children.

There are so many examples that demonstrate an era of passive neglect – as much from silence in institutional governance as other sources - that I could never summarise them adequately in this short presentation. However the aspiration and destination on the part of our creators is changing as a result, which is profoundly unhealthy for Australia.

A Refreshed Policy Mantra

We all recognise that digital technology has changed forever the nature of information access, exchange and the direction of society through politics, commerce, creativity, education and communication in life as we know it.

Continuing fragmentation is guaranteed – the ferocity of attack and the velocity of change will not abate. Merit, ingenuity, speed, flexibility and performance increasingly rule the day. Australia is losing in this process because of national policy weakness. The urgency of public policy renewal especially in education and the humanities is impossible to over emphasise. Our competitive effectiveness will dissipate without refreshed underpinnings in our cultural settings.

We are a small country at 'the bottom of the world' (notwithstanding the internet) with many parochial pillars, which are venomous to bold national ambition and

achievement. A nation of 24 million, which speaks English is either profoundly advantaged or potentially disabled as a result almost entirely of its public policy settings and the ambition and outcomes they reflect.

I suggest in an era of digital disruption it is essential that we respect our duty of intergenerational care and acknowledge the need for national ground up policy and institutional review to ensure a healthy, vibrant and dynamic cultural landscape. One which is innovative, connected, ambitious and challenging.

In other forums I have offered a fresh performance mantra for consideration. One which I suggest is relevant for a globally connected Australia in this century – especially for our grand public institutions.

Do Not Be Bland!

Make a difference and banish the bland! It has been too prominent in our past and should have no place in our future.

We need to... Back The Bold!

We must strive for a voice that renews the reasons to celebrate creativity and intellectual courage. Reasons to protect national storytelling and conserve national social memory. Reasons to win national respect and political commitment. Reasons to renew many specialist depleted training institutions. Reasons to revitalize curiosity, creative originality and to drive innovation fearlessly. Reasons to speak out making sustainable community connections. We need to back, defend and promote that which is about fresh Australian creative adventure.

Since the 1970s Australians have taken to the world as never before. Yet in this current era we are on the precipice of what seems to comprise an overwhelming magnetism for the pedestrian or worse. As a relatively vulnerable little English speaking country in a globally connected world, there is no future in being bland!

Across the sciences and the humanities it is imperative that stakeholders work together to fashion a fresh positively integrated policy approach – one which ensures better cooperation and common objectives. One which identifies this radically changed operating environment and rises to the challenge energetically. Core to that experience is recognizing the authentic nature of experience – whether in the wonder of a state record office, or in a new discovery, or fresh artistic work.

I spent some time preparing this address. In a spirit of close engagement I shared my draft a couple of weeks ago with the director of the State Records Office, Cathrin Cassarchis. She was good enough to take counsel with her colleagues and send back a lively commentary on the impact of digital disruption on the work of the archive. I would like to share my take on the spirit of that feedback with you today.

The senior team indicated that with digital disruption comes digital opportunity. Contrary to the image of archivists working quietly amidst cob-webbed shelves, they said that there has never been a more exciting, innovative and professionally fulfilling time to be working in the archives sector. Archivists are engaged with new

technologies to improve access to complex collections of analogue records and, with born-digital material, to advise government on managing their data.

Their challenge is to clearly articulate the key policy drivers and to innovate and deliver for citizens within constraints which are often shaped by completely outdated understandings and expectations of official records. I had the sense that they take great pride in the fact that archives are valued precisely because in an era where trust is at a premium, they offer that which is authentic, contextually rich and amazingly detailed. They treat the task with respect and enthusiasm.

Moreover archivists build bridges with users from amorphous masses of information which has been retained because it is from a moment and therefore assumed somehow to describe society. That blunt massed approach is then married with seekers after detail and truth often providing fascinating dilemmas as to when to intervene in terms of the selection and curation role as compared with the rather blunt and inflexible approach seen in simply administering an act of parliament to hold and manage records. We live in a nuanced era and it is creatively and curatorially complex. It is different from a 19th century perspective which can permeate unformed views of the wonderful work that archivists perform.

Making the repository they manage comprising vast stores of information which might appear disorganised but which offers a rich harvest for general consumers and scholars equally, provides many interesting tests. Rendering that material in usable and accessible ways is difficult but, done well, it not only aids the process of navigation but assists the liberation of new pathways to discovery, insight and fresh revelation. Marvellous stuff that Geoffrey Bolton for example, relished.

Many fresh interpretations occur in this process and it reinforces just how important institutions such as the State Records Office are. They provide a keyhole or in appropriately modern parlance a wormhole, to new dimensions in our understanding in the cavalcade of human toil and that which follows from it. All manner of fascinating realisations and discoveries appear from era to era with that rich patina of perspectives and diverse prioritisations as we all experience profound change from the amalgam of technology, experience and immense reservoirs of revealed information.

At the heart of it all is the authenticity of the material with the ever present demand within constraints, as to how to liberate analogue and digital material of relevance. How to fairly curate and achieve outcomes which target identified need for fascinatingly different users is intricately demanding. Ultimately archives exist in order to be used, interpreted, re-used and re-interpreted over a long time indeed. I think the work of archivists is unsung but precious to our connection with each other over time. They are a testament to constructive, creative, digital adaptation. Bravi!

Conclusion

In conclusion I would like to raise the stakes a little in order to dramatise some of the trends I have described.

Vivek Wadhwa wrote in a *Washington Post* piece in April that:

“Ray Kurzweil made a startling prediction in 1999 that appears to be coming true: that by 2023 a \$1,000 laptop would have the computing power and storage capacity of a human brain. He also predicted that Moore’s Law (from 1965), which postulates that the processing capability of a computer doubles every 18 months, would apply for 60 years — until 2025 — giving way then to new paradigms of technological change.

“Kurzweil, a renowned futurist and the director of engineering at Google, now says that the hardware needed to emulate the human brain may be ready even sooner than he predicted — in around 2020 — using technologies such as graphics processing units (GPUs), which are ideal for brain-software algorithms. He predicts that the complete brain software will take a little longer: until about 2029.

“The implications of all this are mind-boggling. Within seven years — about when the iPhone 11 is likely to be released — the smartphones in our pockets will be as computationally intelligent as we are. It doesn’t stop there, though. These devices will continue to advance, exponentially, until they exceed the combined intelligence of the human race.”

Clearly we all need to pay attention very closely. Kurzweil is one of the most consistently original digital thinkers, inventors and futurists. The message from Kurzweil is clear – change is accelerating almost unbelievably. Clearly this calls for fresh approaches to keep the public mind in touch with knowledge directions and potential impacts.

Before we over react, and to offer a modicum of comfort, let’s remember that genius Alan Turing – about whom the movie *The Imitation Game* was made - was way ahead of his time imagining many of these things over 60 years ago. Indeed his views on pattern formation and tests for computers with Artificial Intelligence are still in use today. Not quite ‘the more things change, the more they stay the same’, but you get the picture.

At core we need to have our feet on the ground and to be utterly realistic, recognising that these changes mean that standing still and managing institutions in the same way is not an option. Embracing and managing these potent forces which drive reconfiguration in public mindsets is not easy. Relevant responses in approaches to governance, management, planning, and execution are essential if we are to drive sustainable connected and meaningful public engagement. Renewal in methods of disciplined thinking and review are non-negotiable in securing a healthy outlook with good Cultural horizons.

It is going to be a really bumpy ride. I suggest we should relish the journey with a firm eye on the lessons from history, which provide the bedrock to thoughtful perspective in resilient future planning.

Geoffrey Bolton knew that better than most.

Kim Williams AM
6 October, 2015