

Futuring and the Artifice of Ingenuity - Bush Mechanics 101

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Introduction

In Australia there has always been the great outback full of bush (Australia is size of mainland US with 20m compared to 320m folk) and so understandably it has entered our national psyche. Here there is bush everything – bush music, bush tucker, bush lawyer, bush shops, bush doctors, bush mechanics, bush campfire (TV), bush cooking, bush humour, movies are made about it and tourists regularly die when they are lost in it and so forth. When one is living in this bush to get something done one has to think and act ahead using one's ingenuity and come up with innovative practical solutions that work. Of particular interest for this report is – the bush mechanic – a particular breed of Australian who can arguably put the 'z'ing into futuring with her form of engaged and engaging futures research. This work in progress report uses Grounded Theory to identify several attributes of such an endangered breed.

A working definition of a Bush Mechanic/Artificer

The bush mechanic then is deeply ingrained into the national psyche indeed the runner up for the national anthem – Waltzing Matilda – is about a bushie who steals a sheep for food and ultimately takes his own life rather than be caught by the law. Conventionally a bushie is someone who can fix a practical problem with 'fencing wire' and do a great job to boot. The Australian Broadcasting series (see web site in resources) literally shows just that particularly in indigenous communities.

A bush mechanic or artificer learner may be defined for the purposes of this research project report as:

someone who while being deeply and broadly technically skilled is reflexively orientated and who ethically and participatively explores the big picture and prioritises, chooses, designs and enacts forward wisely by creatively developing prototypes towards a world transformed.

Related Concepts

French:

Bricoleur - A bricoleur is a 'Jack of all trades or a kind of tinkerer, a professional do-it-yourself person.' There are many kinds of bricoleurs - interpretive, narrative, theoretical, practical and political. The bricoleur produces a bricolage - that is, a pieced-together set of representations or components that are fitted to the specifics of a complex situation [closest English equivalent – tinkerer – though usually used disparagingly]

L'esprit Accor – is the art of blending skills, of combining traditions of the past with the modern innovation, adding the generosity, discipline, imagination and warmth which can carry our work to a higher level of excellence. L'esprit Accor then is a conquering vision of success. [closest English equivalent – efficacious magnanimousness/morale – 20% fit]

Personal Journey (1994-2005)

Over the past six years many discussions I have been involved in have sought to develop an answer to the question what would an ideal action oriented learning environment look like given one's praxis experiences. As part of this process in the

early 2000's the criteria for such a vibrant learning process were documented and explored. Wildman (2001).¹

In many places in the West, Slaughter's industrial flatland, still rules, there is not much cultural, industrial, vocational or even legal space left for alternatives to survive let alone such 'left field' people as bush mechanics. Nevertheless the more one looked the more it appeared that there were still some bush mechanics left.² Thomson (1995).

Current Research program

(a) Field component

The field research program covers the research period early 2002 to early 2005 (basically a 3 year period). This research was conducted along side key bush mechanics I have had the privilege to work with during this period. My involvement has been to work intensively with some six such individuals. During this exposure to these folk it became increasingly clear that they had a significantly different way of learning and approaching tasks even to being in society in which they deliberately made themselves them 'hard to identify', in our day to day world. These include a disabled person, an artist, a philosopher and a boat technician.

A learning journal was maintained during this period and ultimately detailed the approximately 70 Learning Insights (LI's) that have arisen over this 3 year period. This research project was set in place to chart these 'ways' and 'attributes' and to compare these with those established for artifice learning in the early 2000's.

(b) Coding component

Undertaken from 01-2005 to 03-2005. Grounded Theory was then applied to the field observations from (a) to identify the key categories, attributes or principles of artifice learning.

(c) Write up component

Current; from 04-2005.

Futuring

This approach is that of engaged knowing. This may be termed Futuring³ or 'acting ahead wisely' and is called in this study Artificing commonly know as Bush

¹ This particular (2001) article sought to explore several emerging issues and included the period of my involvement in charting their emergence. Bush Mechanics is on the other end of *emerging issues* it is an *evanescent issue* – yet this current article argues, is an issue of relevance to our futures yet structurally disadvantaged in today's bureaucratized and globalized world of ready made consumerism.

² This article applies the more formal term *artificer* to bush mechanic to indicate the step beyond artisan. Furthermore that the 'spirit' of the artificer was alive, having been marginalised could now to be found in what has been called the 'bush mechanic' - a self reliant person who can, largely in the informal sector, innovate and solve difficult problems practically with what is on hand.

³ To my understanding Jerome Glenn was the first to coin the term 'futuring' when he published an article called 'Futuring..' in January or February in 1972 or 73 - then defined as a process that 1) identifies trends, 2) projects them and includes broad participation to describe scenarios, 3) corrects them to be more normative, and 4) traces them back for policy and strategy to do today. In the early 90's I extended this process by adding an additional four points, 5) seeks to assist in selecting a particular scenario and then, 6) to design implementation thereof through a prototypical exemplar project then 7)

Mechanic. Here reality is established through enactment that is the braiding of thinking and doing. Certainly in terms of futuring this research project suggests that a bush mechanic approach may be seen as one direct application or manifestation thereof.

Grounded Theory

The method chosen to process the field observations of this project into general understanding of the key categories/attributes/principles of being a Bush Mechanic is Grounded Theory. Glaser (1995); Dick (2000). Dick after Glaser suggests two key advantages of Grounded Theory for judging the adequacy of the emergent principle categories: do they fit the situation; and do they work. In this sense such emergent categories can help the people in the coalface situation make better sense of their experience and improve the management of the particular situation.

Of critical importance is to be crystal clear about what most differentiates grounded theory from much other research is that it is emergent, bottom up from observations and explicitly so. Grounded Theory does not test a hypothesis. It sets out to find what theory accounts for the research situation as it is recorded in the field notes. In this respect it is like action research: the aim is to understand the research situation. The aim, as Glaser in particular states it, is to discover the theory implicit in the data.

Bush Mechanics/Artificer Principles as developed through the application of Grounded Theory

The following are the conclusions of the two year grounded theory project designed to elicit the key emergent properties of artificer learners more commonly called bush mechanics. The full grounded theory report details the methodology and procedures as well as presenting the actual journal entries, memos, initial categories and emergent grounded theory categories as they emerged.

NB: The attributes revolve around the grounded concept of the 'exemplar project' and hopefully can provide the basis of a new 'theory of bush mechanics', as such the attributes point to a grounded form of vocational and citizen education that has all but faded from view in developed nations in the past 50 years. Bush Mechanic Principle (BMP).

Being a bush mechanic involves being committed to the following four principles.

BMP 1: The Exemplar Project Principle

Exemplar project – or bricolage - means *a best in class project/prototype which demonstrates a better world is possible for our children.*

For example a project that draws from the BM's learning over a decade of praxis as in broad committed experience. This praxis has helped generate a grasp of the big picture while understanding the small picture from its components in detail, as well as how the sub systems interface. The exemplar project often occurs in the sub-altern, largely

assists efficacious implementation thereof while 8) learning through an action learning cycle there from. Clearly a bush mechanic meets, to differing extents, these 8 criteria, and includes the concept of Anticipatory Action Learning.

informal economy. The project tends to be innovative rather than inventive, and combines business discipline, vocational expertise and social context, that braids thinking and doing; part and whole; individual and collective and is aimed at bettering the lot of our fellow human in line with the requirements of the global problematique.⁴

BMP 2: Social Holon Principle

The exemplar project is seen by the bush mechanic as an example of a social holon.

The exemplar project although it may manifest as a technological or organisational holon is actually seen by the BM as a social holon, after Koestler (1978), as self organising nested system which, is simultaneously part and whole, hierarchically situated yet autonomous, using fixed rules yet flexible strategies, such as the heart in the circulation system of our body.

The Bush Mechanic is a Renaissance person and sees the exemplar project at essence not uniquely materialistic i.e. a technological endeavour yet to be understood holonically. Bush Mechanics tend to integrate life at the individual perspective with the collective.

BMP 3: Collective Responsibility Principle – the Bush Mechanic as Global Citizen responding locally, proactively, concretely and collaboratively to the Global Problematique

The Bush Mechanic or Artificer sees her self as a Global citizen responding locally, concretely, participatively, anticipatively, and proactively with the above two attributes to global futures via. the global problematique by blending internal and external ethics eg. the redefinition of psychological markers such as income, status, time and task etc. The closest historical parallel to this type of combined vocational and consciousness raising that has emerged in Australia and the UK is, for instance, the Workers Education Association (WEA).

In this sense the bushie sees the exemplar project as a living prototypical response to the question ‘how then should we live together? – a sort of ‘Stargate’ portal to one aspect of a better world’

BMP 4: Learning Principle - Learning, Yearning, Earning and Concerning from and with the above

This includes learning from and with the engagement/embodiment/action of establishing the exemplar project.

⁴ As such a bush mechanic can be seen as doing nothing new, or worse as they tend to be particularly singular in focus on task they can be seen as hectoring about their favourite ‘hobby horse’, failing at the main game, demonstrating little self-understanding. being overly practical and even at best a ‘ratbag’ and at worst ‘a professional failure’, even marginalising themselves over time. The key point being, however that in general they do not seek to have their work assessed on its conceptual or textual merits rather by the practical results there from through the folk they work for e.g. their customers. Thus in the think/do dilemma between the academic *and* the practitioner from theory *and* practice bushies locate in the latter, while recognising that like breathing both, inhaling and exhaling, are necessary.

Towards a revised definition of Bush Mechanic/Artificer

Based on these four key outcomes of the Bush Mechanic/Artificer grounded research project we may now postulate a new definition of same.

A Bush Mechanic is someone who, over a period of years and with substantial effort, resources and commitment, and as part of their responsibility as world citizen, participative and anticipatively conceives designs, establishes and learns from an exemplar project to demonstrate today a better world for our children's children. [PW No. 2 21-02; comm.15-02-2005]

In short someone who acts ahead wisely.

Futuring and the Bush Mechanic as a site for Dissent

Some arenas where Bushiness can be a site for dissent from and with today's world are:

- (1) In this hyper regulated world **agency** is regulated out of the system and the bush mechanic challenges this 'dumbing down' by using their agency and structural knowledge of the system to change it
- (2) The engaged nature of the process insists that **Interface** matters and citizens have a right to have a say. The present structure of much interface is being removed by government fiat through Government regulations and corporatisation
- (3) **Action as locus of authenticity**. Textualist can, by distancing itself, allow the performative dimension of discourse to dare to put its own integrity at risk in acting on the world in attempting to change it. Furthermore by acknowledging that success, as in a simple understanding of causation, will, in this dimension of authenticity will often be more complex than with conventional text.
- (4) Bushiness is also about '**choosing, even acting, ahead wisely**' engaged futures research, anticipatory action research, futuring or parakinesia in ancient Greek are all terms that have echoes in the bush mechanic of today. In modern English or contemporary public administration we have no such word that indicates a practical proactive wisdom through social innovation.

Key conclusions from this research indicate that:

- The conventional understanding of Bush Mechanic is valid yet somewhat limited in its breadth and depth of meaning. The concept seems reasonably understandable to and in other cultures esp. French and many indigenous cultures.
- Grounded theory principle categories identified in this research are: (1) Exemplar Project; (2) seeing the Exemplar Project as part of a Social Holton; (3) directly linking the Exemplar Project to address a particular aspect of the Global Problematique while; (4) seeking to learn through the action of establishing the prototype
- Approaching vocational and further education from the perspective of the futuring approach of artificer learning requires substantial change to the existing

educational systems

- An artificer approach requires a synthetic ep. analytic method. It may now be estimated that possibly around 6% of the workforce can be described as a bush mechanic where as 50 years ago the figure would have been around 20%. NB: workforce is a broad term that is in this instance considered to include home managers. Home economics in its ancient sense of prudential household management, may be seen as a ‘cause celebre’ for, and of, the bush mechanic
- Bush Mechanic as a concept in its role of citizen activist is a dimension of normative futures
- The concept of Bush Mechanic has a related history through the artisan category of Artificer that pre-dates the Industrial Revolution even predating the Middle Ages, and may be seen embryonically in the Roman Collegia. It is possible to see elements of the Exemplar Project in the medieval Journeyman’s Piece which, if successful signalled the progression from apprentice to master tradesman.
- Bush mechanics as innovators have prototypes of most useful machines and processes in their sheds however little is done to harvest these ideas. Many are retired and die before getting their futuring ideas out. Otto (1999).
- This research has demonstrated a very close fit between the attributes identified as part of an ideal engaged learning approach and those attributes emergent through the application of Grounded Theory
- The bush mechanic as artificer learner is a ‘case in point’ in demonstrating what ‘futuring’ can be about and has a part to play in at least half of our macro economic future scenarios [as outlined in the Appendix], two of which are crash and burn type depression ones and only in one i.e. in the localist scenario that bush mechanics will be able to thrive. And in the most likely scenario’ (No. 6) bushies are at best just tolerated. So it seems bushies may well continue to be an endangered species.
- The concept is an example of engaged futures research and indeed may well be relevant to other cultures and methods of inquiry. The author is keen to link with other futurists undertaking broadly similar engaged futures research.

Appendix – The Artificer in the context of Longer Term Exoteric Futures and Macro Economic Scenarios 2050

Scenario 1: More of the Same – Happy Nappy Valley angst

Here the gridding down of the mass of people into the flatland, the increasing destruction of the environment and desecration of Gaia continues apace. But such a path as the one we are on with globalisation triumphant - bushies (some +, some -) are acceptable however only for quaint interest for instance in the bushies hall of fame.

Learning is expert, elitist, reductionist and pedagogical and generally unsuited to artificer learning.

Bushies fit: *Not needed*, modern bureaucracies will do the trick – bushies seen as a danger to society

Probability: considering the state of the planet in 2005 a most unlikely scenario

Scenario 2: Techno-utopia – Star Wars goes remote

Here globalisation is also triumphant and has harnessed technological change to assist it. All is produced by technology which also makes most of the decisions i.e. sentient computers and orgoboids (human computer integration entities). Wildman (2000)

See <http://www.accelerationwatch.com/> .

Scenario 2a Utopian - Star Wars goes remote;

Scenario 2b Dystopian – Terminators wired in parallel

Learning is largely unnecessary as sentient technology now does it for us – reality is just a computer game away.

Bushies fit: Bushies *don't fit* into this scenario

Probability: *probable*, consider the promise of globalisation in 1990 and now some 15 years on its downside is becoming obvious to the people yet our 'leaders' persist]

Scenario 3: Economic rebirth – the spiro hippies were right – the new Jerusalem

Localism rekindled – this is the age of local economics – bushies (+++++) can thrive here. Wildman and Schwencke (2003)

Learning is at the heart of community and is based on Adult and Community Learning Androgogy principles most host positive to the bushie and artificer learning.

Bushies fit: Bushies thrive – bushies into thriving survival here

Probability: possible and desirable yet *most unlikely*

Scenario 4: Pax Americana reigns – Attack of the Blob

The dream of the neocons for the 21st century to be Americans century wins through the struggles of Afghanistan and Iraq and so forth – corporate America the American corpor'a'nation triumphs – the economic rationalist reductionist positivist version of globalisation has won – bushies (-----) are hunted down and eliminated.

Check out <http://updates.takingitglobal.org/read-comments?UpdateID=24768> Where [Naomi Klein in an article from 02-05-2005 edition speaks of a Last summer, in the lull of the August media doze, the Bush Administration's doctrine of preventive war took a major leap forward. On August 5, 2004, the White House created the Office of the Coordinator for Reconstruction and Stabilization, headed by former US Ambassador to Ukraine Carlos Pascual. Its mandate is to draw up elaborate post-conflict plans for up to twenty-five countries that are not, as of yet, in conflict, but with a little help from Uncle Sam may just be in the next couple of decades or so. According to Pascual, it will also be able to coordinate three full-scale reconstruction operations in different countries at the same time, each lasting five to seven years]

Learning is something important but for the economic elite which is mainly white, male, 50+ and is about the continuing the classic pedagogical split between thinking (which they do) and doing (which we do)

Bushies fit: Bushies and Artificer Learning *do not fit* it here.

Probability: *most unlikely*

[*The Blob* a 1988 horror/Sci fi movie where a huge amoeba (unintelligent and undifferentiated sort of macropod single cell life form) attacks earth]

Scenario 5: Crash and burn – the economic recursion into Soylent Green

Here the crash of scenario 5 occurs but recovery is not possible esp. in the West which by 2050 is profoundly interdependent and yet simultaneously dependent on cheap imports from the Confucian commonwealth of China, Taiwan, Korea and Japan – bushies (+) can just survive here they find out they need a bushie network of mutual aid assistance as in the last great depression in 1929

Conventional learning here is largely irrelevant and considered dangerous in terms of its track record (massive failure), effectiveness and waste of resources, the informal bushie/artificer learning avenues start to multiply.

Bushies fit: Bushies do reasonably well - bushy skills a necessity for survival

Probability: *likely*

[Soylent Green a 1973 science fiction movie is about a future where disused people are recycled as food ie. economically speaking this means we eat rather than co-operate/aid with one another]

Scenario 6: Economic Pole Inversion – Planet of the Apes

The new economic ice age – bushies (+++) can survive here but tragically most folks won't be able to survive as the first becomes third world and vice versa.

Learning: Intensely difficult in any structured way as survival comes to the fore.

Bushies fit: bushies/artifice learning *does well here* though by necessity rather than choice – these are not happy times

Probability: *quite likely* – the humanist version of Scenario 4

[Planet of the Apes 1968 – a world where apes are in charge and humans do their bidding]

Overview of scenarios: bushies fit reasonably well into 3 of these 6 scenarios. Scenario 6 is considered the most likely in the above time period and all the above scenarios need a 'displacement event' which, on current indications may well be before 2050.

Resources

Web

As sourced particularly in Appendix D and:

<http://www.fbo.com.au/movie.asp?ID=10187>

http://www.bushmechanics.com/pages/bush_mecanics/body_bm.htm

<http://www.abc.net.au/message/archive/bushmechanic/>

<http://www.hotfutures.net.au/bushie/>

Text

Dick, B. (2000) *Grounded Theory: a thumbnail sketch*. Interchange. 28pgs. Dick offers wide referencing and draws strongly from Glaser (1995 etc)

Glaser, Barney G., ed. (1995) *Grounded theory 1984-1994*, Volume 1. Mill Valley, Ca.: Sociology Press. [This and its companion Volume 2 between them carry a large collection (48) of papers from a variety of authors on a variety of aspects of grounded theory. Many case studies are included]

Koestler, A., (1978) *Janus - a summing up*. New York: Vintage. 300pgs.

Otto, L., (1999) *Forgotten Technology and Conversion Charts*. Brisbane: Author printed by Watson Ferguson. 90.

Thomson, M., (1995) *The Complete Blokes and Sheds; including stories from the shed*. Sydney: Angus & Robertson. 280pgs. [links people usually men with tinkering in the French sense as bush mechanics and contains pictures of same in their 'lab' i.e. their shed]

Wildman, P., (2000) *Life Futures: An Initial Taxonomy of Terrestrial and Non-Terrestrial Forms of Life*. *Journal of Futures Studies*. 4(2): p. 93-108.

Wildman, P., (2001) 'Anticipating Emerging Issues: Reflections from a futurist.' *Journal of Futures Studies* 6, 137-152.

Wildman, P. and Schwencke, H. (2003) *Your Community Learning - action learning circles for learning and earning through community economic development*. Community Learning Initiatives and Prosperity Press: Brisbane. Multi Media CD Rom.