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***AUS15: Melbourne Bush Mechanic Workshop series:
Preparation 02-2009 ~ Workshop 1 - Introducing the
Bushy, Workshop 2 - Exploring the Bushy, Workshop 3
- Understanding the Bushy – so crucial to our
children’s survival yet nowadays we wouldn’t recognise
her if we bumped into her on the street.***

Prepared in conjunction with Daryl Taylor integralevolution P.O. Box 247 Kinglake, Victoria
Australia, 3763 61 3 5786 1804 SKYPE - taylor.daryl - promoting a rapid transition to interdependence,
partnership, resilience, wellbeing and sustainability

Paul Wildman
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0412027818 paul@kalgrove.com
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Mission

To work with you to help us, through my being a resource and practical ideas person and you a point person, spread our BM words and deeds in Melbourne, as words and deeds whose time has come.

‘In Australia there is a term for someone who links thinking and doing, and can act forward wisely and solve problems with what is available while developing innovations in the field that respond to broader needs – it is Bush Mechanic,’. [Wildman, P., Bush Mechanics - artificing a future we can live with. *Journal of Futures Studies*, 2005: p.91-100]

* artificer [ar-TIF-iss-uh] a skilful or artistic worker, a craftsperson, one who is skilled in devising things and making things happen, an inventor bricoleur [brik-o-LEUR] tinkerer, jack or jill of all trades, someone comfortable in unfamiliar realms of learning and experience who tries things out until they figure out how to do something. More recently, qualitative researchers who ‘mix and match’ to create a research design which fits the research situation bush mechanic a person who fixes a car (or anything else) using what is on hand e.g. wood, fencing wire, chewing gum, sticky tape or just about anything he or she can find to replace the part that is broken or create a tool to do a good job as well as design and build the tool and the project to get the job done. US – Hack Mechanics in an Invention + nation = ‘Invenation’

In this workshop we study the Bush Mechanic the Artificer in the broad yet concise meaning of the term, is not about seeking to understand the secrets of the universe rather it is about helping us to live better lives today. And to do this in practical ways that demonstrate in concrete project based ways a better world is possible tomorrow for our children’s children.

I agree that achievement does not mean anything in itself. However the experience (phenomena - integrally I and We) and the insperience (Noumena - integrally us and that) of the journey towards achievement does mean a great deal. The life force is in the journey, not only the destination. This is becoming more real for me every day.

Presentation outline – commence 09.00am PtA to 10; PtB to 11, PtC to 01pm, Lunch

1. .1Please list the things you consider vitally crucial today to a positive global future say 20 years out ok? Say you list 5 or 6 things.
- .2Could you could prioritise your 5 or 6 things please?
- .3 How many of you have heard of the Bush Mechanic? - We will be finding out more about this endangered species and its associated academic name – Artificer. NB: this is not the Dodgy brothers – bush mechanic and back yard mechanic are very different terms/concepts. What are some things that come to mind please? List....
- .4 Does the bushy fit into any of these things please?
- .5 Finally - then if you could please distribute 100 points between these 5 or 6 things how many points does bushy have? [compare and contrast this list with your neighbour and we will revisit it at the end of today – now in a couple of minutes lets have your list – just the list ok – Daryl will write up]

[NB: Folks, I know this may seem somewhat simplistic and that these things overlap horizontally and envelop one another vertically however this is to me, and I hope by the end of this workshop to you, as an important marker of your thinking.]

WORKSHOP 1 – 45mtsP+15mtsD ~ Backgrounding the Bushy

2. **The hand drives brain expansion** not VV 1.4 million years ago.
3. **Platonic duality** to University silos (Fred Emery said in primary school we blind kids and in Uni we poke their eyes out) – everyone says they love children but schools still exist (E Hadkins 10-2008 email discussion). Heavens rim.
4. **Entachment** – embodied detachment – most Western spiritual paths see higher consciousness as detachment and disembodiment even etherealisation. I propose the concept of entachment – embodiment to make the world a better place but embodiment not as materialism but rather as expression of the sublime. For a general discussion of this see Brafman and Beckstrom (2006).
5. **Bush Mechanic** → Volk/Voke Handwerker:
Bush Mechanic (BM) – (A) **Bush (Volk/Folk)**, (B) **Mechanic (hand worker)** &, (C) **Bush Mechanic**.
(A) **Bush** has the following meanings (1) provincial, (2) ignorant, (3) savage, (4) outback, (5) folk – Volk in German, while
(B) While **Mechanic** has (1) work, (2) causation viz. the mechanical universe, mechanical linear sequential causation, (3) handworker – handwerker in German, and
(C) **Bush Mechanic** as in Artificer has the additional combined meanings of (1) next step after artisan, (2) broad and deep skills/techne i.e. 720°, (3) creative design ability, (4) practical application of one's capable ingenuity with (5) an eye on the big picture.
Here we can see reflected the key aspects of the BM as emergent in this eBook viz. Exemplar Project see C(3, 4), Social Holon see A(5), Global Problematique see C(5), Action Learning see A(3).
VHW ed = village ed viz. Kids and Adults Learning – vertically integrated Lived Life based, mentor assisted, culturally embedded, community oriented (each to his own) mutual aid learning
(D) **Voke** – as in vocare & derived from vox (L) – to call/voice – comes down to us as 'calling' a vocation a vocation. Vocation is a noun that goes with the verb voke which in today's computer lingo exposes a new model of fluid collaboration even the idea of a vokebot – vokecookie and volkschwarm evenVolkVoke VV.
6. **Techne** (1) citizens responsibility with (2) hand extension not hand replacement (3) hand extension means manipulated by a body not only a mind thus situating the body *in natura* [natura – from which the English word Nature is derived also means talent and talent in Latin also means metier i.e. field of work in which one has special talent. In this sense the hand represented a natural groundedness that interconnects us with nature and nature with us through our metier], (4) broad and deep skills i.e. 720° inc. understanding not just compartmentalised behaviour e.g. CBT, (4) creative design ability (PIDIL), (5) towards meeting community needs/priorities, and all this with (6) a weather eye on the big picture. **Techne** not = **Technique**. **Techne** is often translated as *craftsmanship*, *craft*, or *art*. It is the rational method involved in practically producing an object or accomplishing a goal or objective. The means of this method is through art. **Techne** resembles episteme in the implication of knowledge of principles, although **techne** differs in that its intent is making or doing, as opposed to 'disinterested understanding.' The English aphorism, 'gentlemen don't work with their hands,' is said to have originated in ancient Greece in relation to their cynical view on the arts and manual labour the last of which was fit only for slaves. I suggest the distinction between **techneque** and **technique** the former being the *modus operandi* for growing competence and capability in joined-up interdependent convivial self-care through **techne** rather than growing dependence on individualised market based productivity focused manufacturing and

consumption based on separated out products and skill competencies through technique.

7. **The Sauvage**

8. **The Question/dilemma:** Today what is valued is generallt Thought expressed as Text. Yet we have the answers at hand and yet little or NO Action – how come?

9. **PIIdIL**→2%-2%-10%-85% -1% Campa trailer *doing takes 10+ times thinking* in time and effort – larger Govt infrastructure projects more like 50-60 times

P	I	d	I	L	Σ total
1 (2%)	1 (2%)	6 (12%)	41 (82 %)	1 (2%)	50 (100%)
Strat Plann ing	Acade mia	Architec ture	TA FE	Educa tion	Bushy/O LL/Citiz en

10. **The Research Context:** Our Lived Life as the point of eternal return – the Noumenon and Phenomenon – see App A ∞

11. **Living Knowledge** – OLL - an authentic alternative mode of social inquiry - Harman (1996:36-37) (1) being participatory; (2) holistic i.e. looking at a joined up reality from within that reality through a cultural lens; (3) objective in the sense of transparency and; (4) inter-subjective viz. openness to critique and accountability including an earnest endeavour to be free of and declare biases; (5) partial and provisional nature of all knowledge; (6) acknowledge and address the role of the observer/experimenter; and crucially (7) experiential i.e. phenomenologically based, while **(8) also recognising that the presence of unconscious processes and contents, not as a minor perturbation but as a potentially active major factor in the construction of any society’s idea and practice of science.** Further I would suggest that (1); (2); (7) and (8) indicate a ninth viz. (9) practical viz. acting ahead wisely through the development today of Exemplar projects. Finally I argue that all these point to the need for (10) a joined up education system where voc ed and higher ed are integrated and kids and adults learning is vertically integrated. (11) **participants, inc. the researcher, are themselves engaged in performing a practical art/act** – practices here are placed pedagogically not technically; (12) **aimed not at replacing practitioners commonsense knowledge rather to build and reflect and refine it** in that; (13) **it is directed at the concrete realisation of joint value.** (14) He extends his argument *there is no task more crucial than reassessing the modern mode of inquiry.* Harman (1996:35)

12. **Intermediate/Appropriate Technology** – is related though not directly comparable to artificer technology. IT according to Schumacher has four characteristics: (1) workplaces located locally, (2) workplace infrastructure is cheap enough to be created in large numbers, using (3) simple production techniques and skills, (4) producing basic goods for the local market/use. Artificer Economics fits the first two but not the second two. The Artificer can construct in a boutique manner sophisticated proof of concept type prototypes and exemplars for people worldwide. Furthermore the Bush Mechanic/Artificer technology is deeply socio-culturally embedded.

13. Are Bushies just dinosaurs or are they dynasoars? Or a sort of new black ultra retro is now the go!! 99% answer A.

14. So why **Artificer Homo Shed Habilis and not Homo Holistic Integralis** – the case of urgent and significant positive discrimination due to our socio-cultural meme, doing takes 5-6 times as long as thinking in project incarnation, hand to brain not brain to hand imperative in evolution,

indigenous as exemplars, today we are all consorkers – we work at and for consumption so *we make nothing* (Hogans Hero's Schultz), the crapola is hitting the fan (displacement event), individual and community resilience, reuse not recycle as the lifeblood of sustainability (Cuba and their 50year old cars), the practical wise citizen, wither spirituality (leaving, or living, our bodies)?

WORKSHOP 2 – 45mtsP+15mtsD ~ Outlining the Bushy Research Project

15. The **research program** proper:
 1. The History – in 2001 asked myself the question you have been reading and writing about various learning systems and methods now for 20 years and they are all found wanting – why don't you design your own and see what it looks like – and I did and here we are
 2. Statute of Artificers
 3. From Kant's intellectual/cognoscenti/noospheric centred episteme (1780's) to Schopenhauer's sensations (1820's) embedded in the lived life to a curriculum focus on the Lived Life to Experience to Grounded Theory to Local Theory
 4. The results 4 key descriptors of the Artificer
 5. The exemplar (1) the boat (2) the plant (3) the fish
 6. The social holon
 7. The Global Problematique
 8. The Active Learner
 9. The Shards
 10. The bushy Zen X spot ∞
 11. The relationship of the noosphere and the physiosphere
 12. The Big Picture Kids and Adults Learning
 13. PIDIL
 14. The site – resource site – explain/run through
 15. Using the/our site for your work
 16. Gaming, Web 2

17. **Research Perspectives** for the project – See Appendix B

18. **Related Terms – Practice Theorists, Enactivism, Futuring, Critical Futures Praxis, Praxeology, and social action.** Herein the themes of Artificer Philosophy are more in line with the practicalities of agency, intent (with an interaction between individual and collective dimensions thereof), and project 'D'esign. It is not about studying the individual psychological aspects of say intent or agency but rather the effects and outcomes thereof. Nor is it about seeking to unlock the secrets of the Universe.

In this workshop we study the Bush Mechanic the Artificer in the broad yet concise meaning of the term, is not about seeking to understand the secrets of the universe rather it is about helping us to live better lives today. And to do this in practical ways that demonstrate in concrete project based ways a better world is possible tomorrow for our children's children. This further means the Artificer cannot be studied in a conventional schooling/university setting. Nor is Artificering about choice theory. Finally the **Artificer action is difficult to fit into top down academic taxonomies** (such as *werrational* – means focused and *zweckrational* – end focused, etc.) as it fits a little everywhere and nowhere. Rather I see it as a duty ethic towards a meaningful life with a Volk/lived life anchor. Maybe we could say the Artificer is involved in manifesting '*rationality*'. I have however explored, in some detail, the attributes of Artificer Action in the appendices of the principal eBook of this series.

19. **Aust Labour Market Estimates of the vocational significance of the Bushy**

M'tea Break for 20mts

WORKSHOP 3 – 60mtsP+20mtsD+05C ~ Foregrounding the Bushy

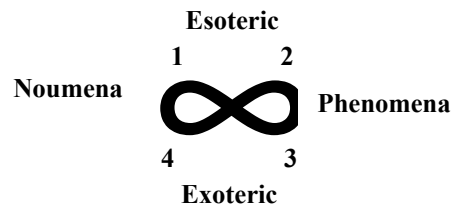
[P - Paul; D - Discussion; C – Close]

20. The definition the balance and overlap and separation of the noosphere and physiosphere – a or b, a and b, a with b, ab.
21. Underground bushy – shards, haute lux and computer gaming
22. The Bushy economy – BMW 180\$/hr – psychological position towards profit by the bushy is not to be taken as a lack of interest in innovation or space exploration just she is coming from somewhere quite different to ‘the new inventors’, dual economy, || economy, mutual aid economy, mates rates economy
23. What you always wanted to know about futures but didn’t know to ask!!! Ethics, craft and prioritised collaborative convergent action
24. Redo your list from this morning – any changes? Any action plans? Please discuss with your neighbour and the group.
25. History Remaking Itself – macrohistory and the Artificer – a pedagogy reprised – see Appendix C
26. Local rates of innovation and the importance of the Bushy
27. Voc Ed for the Bushy – Action Learning cp. CBT
28. Quo Vadis the Urban Bushy – phantom of the opera?
29. The Bushy Hall of Fame, clearing house and from Men’s Shed to Bushy Barn, Artificer conference/conflab
30. From an illegal alien prehistoric dinosaur or transmodern dynasoar
31. Towards a transmodern Artificer Ontology: Artificer | eNuffer | Elder
32. .1Please look at the list you made this morning of the things you consider vitally crucial today to a positive global future say 30 years out ok? Say you list 5or 6 things.
.2Could you look at your priorities of your 5or6 things please?
.3 Now you have found out a bunch more about the bushy have your priorities changed?
.4 Does the bushy fit in more or less to these priorities please?
.5 Finally - then if you could please distribute 100 points between these 5or6 things how many points does bushy have? [compare and contrast this list with your neighbour and we will revisit it at the end of today – now in a couple of minutes lets have your list – just the list ok – Daryl will write up]

01.00pm Lunch Break 45mts – to then by request to 03.00pm

Appendix A: Our Lived Life as the point of eternal return

Figure 1: Our Lived Life as the point of eternal return



Explication of Figure

(1) 4 ~ I've been to the mountain top (Martin Luther King/Ghandi style); 2 ~ Artificers Exemplar Project (as per this eBook) – I call this 'deep science'; 3 ~ Our day-to-day (D2D) (as all experience them) - methodology; 1 Theosphere/ transcendent Noosphere (e.g. University study, the cognoscenti principles & theories underlying our D2D reality) – mythodology. EP here means self-actualising project in the sense of agency and communion in accordance with the four principles of the Artificer.

(2) **The point of eternal return:** viz. the intersection of the arms of the ∞ symbol is an **X** - that of the point or indeed self, eternal return (not rerun!) – metaphysical empathy. This is the realm of for instance the depth Artificer.

(3) **Our (transmodern) lived life** then incorporates all 4 & hopefully balances towards X, X is the premodern or primitive or archaic ontology & supported consciousness which is possibly also that of dogs, elephants, primates, dolphins, even angels & Gaia – this is ontology that supports an inclusive/participative consciousness

(5) **Noumena** – thing-in-itself as the ground of being & domain of first causes; **Phenomena** –thing-as-experienced through time space & causation; **Exoteric** – day to day ~ mundane; **Esoteric** – behind the mundane ~ sublime

(6) **This ∞ metaphysical view of OLL**, since it includes the Noumenal, has its inception prior to consciousness which therefore in turn is prior to the phenomenal which is therefore prior to philosophy which in turn is prior to subject & object which therefore in turn is prior to duality which in turn is prior to the scientific method, which in turn is prior to modernity, for as in the Talmud saying 'we do not see things as they are but as we are'. Consciousness, & thus philosophy, in Western Kantian terms is built on rationality not sensibility. Indeed the onrush of technology, science, & rationality has effectively & thoroughly invalidated the authority of God. So that if consciousness is a prerequisite for philosophy what then is this thing we call consciousness? In monist terms it emerges from, the ground-of-being – the Noumenal, and expresses itself interactively as the phenomenal of OLL

(7) **Phenomena has invalidated Noumena** & with it invalidated the attributes of the Noumena such as the urge to artifice & ethics such as love thy neighbour while validating SMI, the curse of the West (Secularism, Materialism & Individualism).

(8a) **1→3=I am what I do;** (8b) **3→1=I do what I am** – the Artificer preferences (7a), where as classical theology inc. Luther, Scholastics & Universities preferenced (7b) by seeing learning as textual not contextual thus text not context generates what one is, which also spoke of the social philosophy of the 1800's viz. a criminal class can't be anything else they do what they are. This is why wood work, metal work & home economics in games & in school & in Adult Education is a critical part of learning for Kids & Adults.

(8c) **w.r.t. Artificer principles:** Global probematique viz. 1↔4; Social Holon viz. 3↔2; Exemplar Project 'X'; deep Learning ' ∞ '.

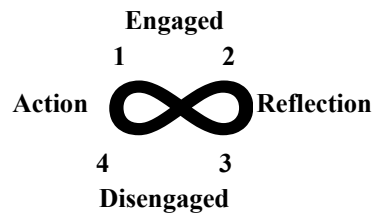
(9) **Indigenous Australian translation:** Noumena →Dreamtime; Phenomena →Tribal life today; Exoteric →Ancestors life; Exoteric →Our life. 4 ~ Today we are the dreamtime of our ancestors; 2 ~ Walkabout and Corroboree are our today paths of our (transtemporal dreamtime) ancestors; 3 ~ Day to day tribal life which is the dreaming of our ancestors; 1 ~ our ancestors dreaming within which we today live. Wildman (1996 & 1988)

(10a) **Both 'I think therefore I am' and its obverse (10b) 'I am therefore I think'** both presuppose (1) consciousness & (2) duality, both perquisites for philosophy itself. Here we confront the foundation of Western ontology the Cartesian assumption that grants a necessitous epistemological priority to the 'I' that (1) is conscious and (2) thinks in (3) dualities.

Source: P Wildman 11-11-2008

Appendix B: The Four Moments of Artificer Learning: diagramming the Bushy's Zen Spot 'X'

Figure 1: The Four Moments of Artificer Learning and the Bushy's Zen spot 'X'



Explication of Figure

- (1) **Engaged Action** – undertaking the exemplar project
- (2) **Engaged Reflection** – design time, reading instructions, discussion about what to do next & how to fit this with that, , ah ha moments, learning insights, double sided washer
- (3) **Disengaged Reflection** – discussing the big picture, drawing potential solutions, applying grounded theory to Learning Insights, paper/seminar presentation on same
- (4) **Active Disengagement** – sabbatical, turning over the issue on ones sleep, let's take a breather, let's have a beer mate & talk c*#p

Explication of the 'X' Zen spot

- (5) **The Zen spot/point of eternal return:** viz. the intersection of the arms of the ∞ symbol is an **X** - that of the point or indeed self, eternal return (not rerun!) – metaphysical empathy & volk consciousness. This is the realm of for instance the depth Artificer.
- (6) **Our (transmodern) Bushy** then incorporates all 4 & hopefully balances towards X, X is the premodern or primitive or archaic ontology & supported consciousness which is possibly also that of dogs, elephants, primates, dolphins, even angels & Gaia – this is ontology that supports an inclusive/participative consciousness
- (7) **Before enlightenment** there was the river, work, life etc. (Action→(1)→(3)) active engagement; **at enlightenment (satori)** there was unity viz. disengaged reflection ((3)→(2)) Disengaged Reflection; **after enlightenment** there was the river, work, life etc. disengaged action ((2)→(4)→Action). One arrives where one started (Action) to know it for the first time
- (8) **'X' or Zen spot** is the x at the centre of the diagram where the four moments are balanced dynamically viz. Action | Reflection | Engagement | Disengagement
- (9) **This position is to journey to arrive at 'X' & to know it for the first time**

Explication of the pedagogy behind the 'X' spot as Artificer learning process

- (10) **'X' is not cognoscenti** (books I have read - thinking) (3), **nor is it practitioner** (projects I have done - doing) (1). Conventional pedagogy insists it is either of these with (3) being valorised & (1) being pejoritized – the educational system (Higher V's Voc ed).
- (11A) **How does the Artificer/Bush Mechanic inc. myself arrive at 'X'?** Take for instance take a washer/chooks/boat etc. The Bushy approaches from a different cycle than the aesthete in (7) above:
 - (1) [1 to 1 - (*child shows feather to carer*) **engaged action** from the child's lived life in the shed – washer/chook/memo pad/pickling SS welding on the boat trailer using washers/feather etc. etc.]
 - (2) [1 on 1 - (*child & carer discuss the feather & finding it*) **engaged reflection on action** – form & function of the washer/feather – feedback/demonstration by Artificer holding the washer]
 - (4) [1 to 1 - (*carer helps/explains to child find out & play the feather*) - **disengaged action** – two sides to the washer – this is how you do it/simulation **mimesis I**
 - (3) [1 in 1 - (*inner child realises what outer child has found*) - **disengaged reflection** on the feather/washer & epiphany/insight – personal realisation] → (1)[1toSeveral – child to colleagues - action/the shed – washer & know/wise it for the first time wisdom i.e. **'X'** – **mimesis II**: mimic now with

understanding] → (1)

(11B) Now back to the feather/engaged action & the child knows it for the first time

(12) Weakness of this position: (A) it is strongly countercultural, (B) it requires the learner to enter the presenter's story line (@(1)) that is **personal sacred space** that is **not** the **abstract cognoscenti commons** of (3)

(13) Q: How do 'we' (collectively as culture) arrive at 'X'. A: 'we' never do – no education system joins up & valorises these four dots. E.G (1) CBT based Voc Ed – competencies/tickets, & (3) conventional humanities Higher Ed – books/library. (4) is particularly elusive as it pertains to the ilk of Ghandi, Mandela etc. [**Intelligent Narrative Play** in child care comes closest to Artificer Learning & some Adult Ed also approaches it]

Explication of links to other forms of embodied learning

(16) Artificer Learning: →(1)→(2)→(4)→(3)→(Engaged Action) →(Engaged Reflection) →(Disengaged Action) →(Disengaged Reflection) [AL = engaged learning for and from ordinary life/Volk/Our Lived Lives = The Bench = Process→Product→Purpose→Grounded = e.g. Economics is the prod and distrib of goods & services for everyday human life] NB: **Enactment** and **Embodiment** in the Bush Mechanic wisdom sense **includes all four moments/stations** of the cross so to speak e.g. in the sense of enactment of legalisation requires/implies all four moments.

(17) Intelligent Narrative Play (INP): as for Artificer Learning: →(1)→(2)→(4)→(3)→

Homologues

(14) Experiential Learning: →(1)→(2)→(3)→(4)→(Concrete Experience → Reflective Observation → Abstract Conceptualisation → Active Experimentation). Kolb (1984: Fig 3.1pg42).

(15) Action Learning: →(1)→(2)→(3)→(4)→(Action) → (Observation) → (Reflection) → (Generalisation/plan) Carr & Kemmis (1986:165).

(16) Applied & Pure Research: (1) → (2) applied research; (3)→(4) pure research

(17) Satori: →(1)→(3)→(2)→(4)→(action)→(unity)→(Action)→(Unity)

(18) Conscientisation: is primarily about (1) & (2),

(19) Academia is primarily about (3) esp. humanities

(20) Voc Ed is primarily about (1) esp. TAFE and Competency Based Training.

(21) (3) & (1) connect officially through pedagogy, policy instructions, fiat (bureaucracy/cognoscenti) (top-down), rather than sensei/master-craftsman (collegiate) & unofficially through entrepreneurship (bottom up)

(22) Pedagogical cycle: (1) is (brainless) activist, (2) is politician (conscientised by (1)), (3) is academic (an armless brain), & (4) Sensei (in the Aikido/Zen sensei)

Source: P Wildman 23-10-2009 comm. 16-12-2008. NB: **homologues** are broadly similar though not identical functions as for a wing on a bird is homologous with the fin of a fish – both guide animal through its host medium. For instance *disengaged reflection* is homologous to, though not completely identical with, *abstract conceptualisation*.

Carr, W. and S. Kemmis (1986). *Becoming Critical: Education, Knowledge and Action Research*. London, Falmer Press. 250pgs

Kolb, D. (1984). *Experiential Learning - Experience as the source of learning and development*. New Jersey, Prentice Hall. 255pgs

Appendix C: Research Perspectives for the project – situating the Artificer

This eBook argues several further points in relation to the *historical situating of the Artificer* viz.:

- (1) that the **Artificer is not uniquely skin-bound**. In fact I argue that the Urge To Artifice (UTA) is one basic to the human condition and thus we have an individual (agency) and collective (communion) perspectives
- (2) For instance the Cathedral Towns of Medieval Europe illustrate this point first the Artificer el ar individual designing the edifice and signing his stones (often for practical payment reasons of course but not always) and the collective el ar the town in contributing labour (no slavery) with the result – the cathedral - being a sort of collective communion. Here the Exemplar Project, the Cathedral, may be seen as a **classic example of self and communion actualisation whereby** through the project the individuals and town in effect ‘works itself out’.
- (3) While I was formulating the account of the artificer I was directly involved in the field with one undertaking the fabrication of an exemplar project. My **standpoint or situational epistemology** then was participative (though as gofer, labourer, bill payer and in part designer i.e. apprentice, rather than as Artificer proper). The research was direct, participative, physiospheric (welding, cutting, measuring, cleaning, carting, gofering etc.) and noospheric (journal entry each day, seeking reading material and discussions on my standpoint and on what I was finding out and my intimations and emergent ideas and concepts). This research was not from the point of a distant detached objective perspective – a ‘view from nowhere’ if you will rather **it is a ‘view from within the project’ perspective even a subaltern w.r.t. skill, capability, expertise and experience, within the project.**
- (4) Nor was the **research was not based on a simulacrum type post modern type disaggregative ‘critique perspective’ rather it is a syncretic participative grounded theory/ethnographic perspective**
- (5) Originally before I commenced this project I had met the Artificer and recognised that there was something I didn’t recognise/understand about him and what he stood for that was important yet I did not know what it was. In this sense I recognised he was a Bush Mechanic but I was not aware of how that was. His, and other Bush Mechanics I subsequently worked with, voices were silent (for me that it is) so it was **out of this silence** that I sought to explore the silence, then the construct as per the four principles of the Artificer and ultimately to seek to trace the energy/urge as best I could retro and pro -spectively.
- (6) In continuation of the previous paragraph, I have sought to demonstrate that the Artificer can be seen, hopefully, as **History remaking itself** and as we look to the world’s multiplicity and multiplexity of problems the **pedagogy behind the Artificer/Bush Mechanic** both individually and collectively, **can make a crucial positive contribution to our childrens’ childrens’ futures.**

Appendix C: History Remaking Itself – Macrohistory & the Artificer – a pedagogy reprised

History or more correctly macro history Galtung and Inayatullah (1997) identifies patterns in the past that can be germane for understanding possible courses of the future. The idea of the artificer can be anchored millennia in the past within a particular pedagogy. Indeed one such historical anchor predates even the Neolithic, another goes even further back to around 1.5million years even to the socio-evolution of our very species, by linking the initial development of the human hand to the subsequent development of the brain whereby it trebled in volume over a million or so years. Another is the guilds of medieval Europe and their apprenticeship approach to pedagogy. This pedagogy ultimately went out of favour in the peak of industrialisation for the two centuries from 1800 to the present¹.

A French Take on Engineer – Ingénieur – Ingenuity → the bushy as obtaineur Ingénieur

Engineer in French is ingénieur and ingenuity is ingéniosité – other related French words are animateur and obtaineur. Zen and the art of Ingeneering for instance. In this sense a Bush Mechanic is an Obtaineur Ingénieur (OI). See <http://www.cyberferal.com/> for an Australian example of OI in the obtaining of materials to make and then play guitars and banjo's in their Uncle Bob Guitar manufacturing project.

The Guilds: In the Middle Ages the G's and the C's were mutually reinforcing in that the guilds helped build and adorn churches and the churches helped maintain the guild's monopoly socio-economic-labour market- cultural position. Norwich (a small rural town in the UK) in 1398 had 164 guilds). The clergy had become a caste and in effect had power while the laity via. the guilds had become a sort of auxiliary caste who had the money. The two synergised in, for instance the great cathedral towns. Johnson (1976:224-5).

Clerical orders as adumbrates of trade guilds as gateways to the Noumenon (Buddhist, Aboriginal and Christian examples)

Here I argue that there is a case to argue that the trade guild can be seen as a homologue of the religious order.

¹ Presently we need to interrogate the Vocational Educational pedagogy based on its Competency Based Training (CBT) incorporating its bureaucratic controls, technologies of discipline and identify how this pedagogy, a child of Taylorist social science and positivist economics with its 'view from nowhere' and handmaiden to globalisations' obsession with so-called 'free' trade and, 'international competitiveness' with its antipathy to anything local, continues to sustain related socio-economic power differentials and psychological dependency, lower rates of Artificer innovation and un-criticality of the learner and her pedagogical context.

Further Ilich's (1973) notion of conviviality, i.e., shifting from individual CBT cogs in industrial or bureaucratic wheels in the context of pathogenic power hierarchies to genuine and creative engagement in mutual problem solving and creative evolveability that emerge individual and collective and nested sustainment's.

Buddhist Artisan Monks and the heritage conservation of rare trades

Historically this was also the case in regard to many **Buddhist** monasteries, in Tibet and Laos and further, unlike its western counterpart, this tradition is still alive today especially in their mandalas. Indeed Since the centre's inception, several monks and novices have - with satisfactory results - attended the training, with the effect that Luang Prabang now has its first trained monks artisans in many years. This new generation of monk-artisans is now working on the (restoration of) the decoration of Luang Prabang's temples, therewith reinvigorating their role as caretakers of the temples while retaining and respecting and practicing traditional arts and building crafts at the 'UNESCO Training Centre for Laotian Traditional Arts and Building Crafts Luang Prabang' – a heritage project indeed simultaneously protecting rare trades, rare heritage buildings and heritage esoteric beliefs.

[<http://cms.unescobkk.org/index.php?id=2482> - assessed 01-2009]

Consequences are an integral (not external) to ones vocation

The Artificer makes it clear that rewards and punishments or consequences are inherent, intrinsic and integral to the activity which is an integral part of one's vocation. The church/vocation (next world eternal life reward) and society (this world \$ reward) however have developed the external/extrinsic (indulgences (spiritual/esoteric marketplace) and exotierically market based commodification) reward system. Orthopraxy - right action - rather than Orthodoxy - right beliefs.

Aboriginality and protecting rare trades

It may well be that we see in the above a further homologue with Aboriginal culture wherein as in the Laotian Buddhist artisan monk tradition rare trades can be protected within a Dreamtime model. In this ancient model as in Appendix A and B above the mundane and the spiritual interweave and recycle.

Here at last we can see, I argue, a homologue between the Christian Cleric, Buddhist Monk and Aboriginal Elder,

Christian Artisan Monks

Again here I argue that there is a case to argue that the trade guild can be seen as a homologue of the religious order. The guilds enforced or at least insisted on their own form of asceticism a little like the wandering **Christian** monk's of the medieval period **adumbrates** with a certain **synesthesia** the knaver then journeyman as the wandering tradesperson ascetic² even the in situ artisan monk (inc. musician, wine maker and architect in ancient days), often eschewing personal and collective financial reward seeing the *calling to vocation* as an exoteric one with an esoteric adumbrates in the clerics life.

Reengaging the Noumenal

Here we revisit the 'noumenal realm' of *AUSI: The Depth Artificer - some speculations on the origins of the Urge to Artifice – a metaphysical aside: balancing and exploring the Moral*

² aesthetees-theet – noun 1 a person who has or professes to have refined sensitivity toward the beauties of art or nature and 2 a person who affects great love of art, music, poetry, etc., and a certain indifference to mundane practical matters. Ones lived life here is to be one of devotion to calling rather than dissipative consumption.

Philosophy of the depth Artificer through the Phenomena and Noumena. Brisbane, Kalgrove Pty Ltd: 40pgs. Wildman, P. (2009), viz. the experience of one's own existence (ones lived life) where science was not seen as automatically superior to intuition or labour. In this project, art or the exemplar project as a homologue of cathedral, was given an especially high place, as it was considered the gateway to the noumenon. In these ways I argue that there is a case for seeing an adumbration even homologuesque relationship between the two dimensions of calling – exoteric and esoteric.

The lack of interest in conspicuous consumption adumbrates the cleric's pledge of poverty; the meticulous application to task adumbrates the cleric's call to a rigorous prayer life and piety; the lack of interest in commercialisation adumbrates the cleric's pledge of poverty; the traditional medieval period of apprenticeship of 7 years adumbrates the clerics (Jesuits) period as novice.

The bushy as artificer as elder vernacular monk/priest.

Appendix D: KAL/Artificer Learning Attributes

1. Incompatible with existing pedagogy
2. Vertically integrated
3. Intergenerationally authenticated
4. Horizontally co-ordinated
5. Locally articulated
6. **5a. Be perception/experience/doing not cognition/theory/thinking based**
5b. Thinking and Doing braided if not merged and equally valorised
7. **Schools, curriculum, pedagogy, assessment to be drawn from the Lived Life of the Community/Volk**
 - 7a. **All subjects to be (1) handy, (2) incorporate student designed, (3) project based, (4) co-operative, (5) functional in big and small picture senses, (6) inc. home/community input**
 - 7b. P&C integrated into admin and curriculum priorities
 - 7c. Learning mentors (previously called teachers) to be 50/50 pedagogy and ‘experiencagogy’ or ‘bushygyogy’, ‘artificeagogy’
 - 7d. Pedagogy to be 50/50 pedagogy and Androgogy
8. **Volk/Voke balance – The artificer makes it clear that rewards and punishments or consequences are inherent, intrinsic and integral to the activity which is an integral part of ones vocation.** The church/vocation (next world eternal life reward) and society (this world \$ reward) however have developed the external/extrinsic (indulgences (spiritual/esoteric marketplace) and exotierically market based commodification) reward system. Orthopraxy - right action - rather than Orthodoxy - right beliefs.
9. Intelligent Narrative Play (Kids Learning) ∞ Adult Learning Lived Life Projects (Adults Learning)
10. VET and Higher Ed braided if not merged
11. School play night to be school project display day
12. Displayed on a public assessable interschool web based clearing house
13. **Experience** in the sense of integrating the Latin meanings of:
 - . sentio - feel, **to feel**, to judge, perceive, **suppose**, to perceive, vote, **hold an opinion**
 - . usus - **to use**, employ, **skill** (solers – adroit, ingenious; faber - fabricate, craftsman, artisan (Gk: techne)), possess, profit, **enjoy**, advantage, **associate with/mutual**, find
 - . experior - **to try**, to test, put to the test, **ascertain**, prove
 - . eventus - **outcome**, fate, **success**, event, occurrence, **consequence**, issue, result
14. **Make** in the sense of integrating the Latin meanings of:
 - . effingo - **to form, fashion**, duplicate
 - . efficio - to do, produce, effect, **bring about**, cause, prove, to bring to pass

- . planto - to set in place, form, **shape, plant**, fix in place
- . creo - **create**
- . pario/partum - to bear, **bring forth**, produce, create, get, to spawn

15. **Exemplar** in the sense of integrating the Latin meanings of:

- . libero - sufficient, disinterested, free, generous, charitable, **beneficent**, hospitable, bountiful, bounteous, handsome, unsparing, ungrudging, unselfish
- . probus - upright, **ethical (PW)**, liberal, generous

16. **Project** in the sense of integrating the Latin meanings of:

- . exsto - **to stand out**, appear, **be extant**, show itself
- . emineo - to stand out, **be remarkable** (exemplar PW), conspicuous, to be prominent
- . exertus - tested, tried, **thrust forward**, approved, experienced

17. Curriculums to be based on the above

18. ACE resacralised, extended throughout society with its informality and mutuality respected and Adult Learning linked through the Exemplar Project to Kids Learning via Intelligent Narrative Play

19. From Behaviour based disaggregated analytic CBT to Exemplar based interaggregated synthetic PBT (project based training)

20. Synergistical (1+1=3), Relational (interface, the dots joined up), Synthetical (whole is more than more than the sum of the parts), Practical (efficacious wisdom)

Appendix E: FAQ: Q&A ~ Reconstruction of Macrohistorical evidence for the Artificer emergent from the research from this eBook series

Q1: What are the prime learning modalities today? And what is their respective importance?

A: Head Learning and Hand Learning viz. Cognitive abstract theoretical head learning 95% cp. genuine experiential hand based lived life learning <5%

Q2: Are there evidences today of a DIY mindset or handset?

A Yes in the living vestiges of DIY such as ACE, cooking, seamstressing, mechanicing, gardening, owner 'buildering', fabrication, doctoring, hunting, gathering

Q3: Is there evidence of a pattern in these vestiges

A: Shards/Fingerprints – but what of and who made them?

Q4: Is there evidence that these for these patterns to fit together together?

A: The 'spirit of the craftsman', the 'spirit of the artisan', almost an urge to enact for me the urge to artifice

Q5: Is there current evidence of an ongoing declension in these vestiges/shards/mindset?

A: ACE decline, dropping of home economics, metal shop and wood working in Primary school, closure of manual arts and technical teachers colleges (Qld – Courier Mail: Mon 22/12/2008 pg17, Manual Arts Teaching on Scrap heap), escalation in planned obsolescence and throw away and replace consumerism, CBT.

Q6: Historically what is the evidence for this pattern back to say the year 0 say to 2000BP?

A: Stature of Artificers in 1563, Chartres Cathedral,

Q7: Newgrange, the Pyramids and Stonehenge i.e. to say 5000BP?

A: Babylon and Sumerian evidence for Apprenticeship like learning systems. Estimate of hand based learning of 95% and head based priestly learning <5%

Q8: What is the evidence for a different species of Homo in which this pattern is macrohistorically embedded?

A: At 35000BP³ there were three surviving forms of Homo viz. Homo neanderthalensis, Homo floresiensis and Homo sapiens⁴. The eruption of the Toba

³ **Archaic Homo – Homo sapiens** (wise man) - collectively, the very robust, regionally differentiated regionally and with different average intelligences, human populations that lived in Europe, Asia, the Middle East, and Africa from 35,000 to 200,000 years ago. **Hss** (modern man) evolved at that time in Africa and replaced the Archaic Homo.

⁴ inc. **Homo habilis** (handy man) because tools were found with his fossil remains. This species existed between 2.4 and 1.5 million years ago. The brain size in earlier fossil specimens was about 500cc but rose to 800cc toward the end of the species life period. The species brain shape shows evidence that some speech had developed towards 1.5myBP. **Habilis** was about 5' tall and weighed about 100 pounds.

Homo erectus lived between 1.8 million and 300,000 years ago. It was a successful species for a million and a half years. Early examples had a 900cc brain size on the average. The brain grew steadily during this period esp towards 0.5myBP. Toward the end its brain was almost the same size as modern man, at about 1200cc. The

super volcano in Sumatra, 75,000 years ago, the impact from this super-volcano Toba could have reduced homo sapiens to 1000 breeding pairs when the plume which entered the upper atmosphere blew over east Africa where our forebears lived in contrast with Homo neanderthalensis whose territory in Europe was untouched by this eruption.

Q9: What is the social anthropological⁵ evidence for the importance of this pattern in socio-cultural development 10000yrsBP?

A: Archaeological evidence, extant Indigenous Neolithic (Gypsies) and Palaeolithic Homo sapien sapien tribes (Australian Aboriginal) have lived life vertically integrated holistic community wide (artificer type) learning systems.

Q10: Archeologically what is the evidence for the importance of this pattern in early hominid evolution say 1.5myBP?

A: Hand caused the brain to evolve not VV. Several upright hominids coexisted sometimes contemporaneously. At this time our ancestor Homo habilis (500cc brain capacity 2myBP), had a brain capacity about the same as a modern day chimpanzee and about half of today's human yet had an anatomically similar hand to modern man and could make and hold tools in the same way as we do today. In the early 20th C this was not what the establishment had expected in that it was thought that brain development drove evolution though tool fabrication however this shows otherwise early hominids using tools had brains more akin to chimps than modern man.

Here the mind is the extension of our hands not the hands as extensions of our brain viz. Hand → Head not Head → Hand.

Q11: Is there a difference between cooperation and competition and could this be hardwired in hominids inc. humans?

species definitely had speech. **Erectus** developed tools, weapons and fire and learned to cook his food. He traveled out of Africa into China and Southeast Asia and developed clothing for northern climates. He turned to hunting for his food. Only his head and face differed from modern man. Like **habilis**, the face had massive jaws with huge molars, no chin, thick brow ridges, and a long low skull. Though proportioned the same, he was sturdier in build and much stronger than the modern human.

Homo habilis 1.4+myBP – BC 500cc and then **Homo ergaster** (working man) 1myBP – BC 800cc) and then Homo erectus (walking man) 1-1.5myBP – BC – BC 500 to 900cc during this period then in turn **Homo sapiens** 0.5myBP - BC 1400cc.

About 25% of our metabolism is devoted to brain function, which represents a huge investment of energy-- and therefore a huge risk in terms of the overall chances for survival of the species particularly for the large brain **H Sapeins**. **Homo erectus** (1100cc brain capacity). **Homo habilis** has often been thought to be the ancestor of the lankier and more sophisticated **Homo ergaster**, which in turn gave rise to the more human-appearing species, Homo erectus. Debates continue over whether **H. habilis** is a direct human ancestor, and whether all of the known fossils are properly attributed to the species. However, in 2007, new findings suggest that the two species coexisted and may be separate lineages from a common ancestor instead of **H. erectus** being descended from **H. habilis**.

http://www.wsu.edu:8001/vwsu/gened/learn-modules/top_longfor/phychar/culture-humans-1one.html

⁵ Many academic programs take a "four-field" approach to anthropology that encompasses physical anthropology, **archaeology**, linguistics, and cultural anthropology or social anthropology. This eBook series takes this view that archaeology as the study of artefacts in order to determine movements of humans is, in this regard, a subset of anthropology. [Archaeology studies the contemporary distribution and form of artefacts (materials modified by past human activities), with the intent of understanding distribution and movement of ancient populations, development of human social organization, and relationships among contemporary populations] http://en.wikipedia.org/wiki/Anthropology#The_22four_field.22_approach

A: If one really want to centralise an organisation, hand property rights to a catalyst and tell him/her to distribute resources as s/he sees fit. With power over property rights, the catalyst turns into a power leader and cooperation become competitive. This is totally consistent with Pierce and White (1999), who claim that all primates know how to operate (1) cooperatively and non-hierarchically, or (2) competitively and hierarchically. When resources are scarce, it is the former; when resources are centralised, it is the latter that emerges.

Appendix F: False dichotomy between Pure and Applied research – the Hobby Scientist reprised

The conventional view trickle down - is that there is a fundamental difference between science, applied science and technology. This difference is generally thought to be understood in terms of aims and ends pursued. Pure science is synonymous with ‘basic research’ and it includes ‘a method of investigating nature by the experimental method in an attempt to satisfy the need to know.’ In order for something to be considered pure science, according to conventional arguments, the aim of the research is strictly curiosity. Thus applied science, is ‘the use of pure science for some practical human purpose’, it is concerned with ‘discovering applications of pure theory.’

In other words, pure science aims at knowledge and is concerned with theoretical constructs ordered towards knowing, while applied science aims at practice and is concerned with theoretical constructs ordered towards practice. Technology, thus, is different from applied science in that it is ‘a little nearer to practice’. While both employ experiments, applied science does so guided by hypothesis that are deductions from pure theory while technology employs a method of trial and error and ‘skilled approaches derived from concrete experience’. Consequently technology is more synonymous with skill and its application in an activity that immediately produces artefacts.’

An alternative view viz. the ‘bottom up approach’ - an economic history of the centrality of the hobbyist to pure science. Yet Kealey (1997)⁶ would beg to differ he argues strongly that both in the United States and Britain the whole scientific enterprise was inspired by self supporting applied hobbyists who neither sought nor received Government funding rather than pure researchers on tenure or paid by Government grants. According to Kealey, ‘The loss of the hobby scientists has been unfortunate because the hobby scientists tended to be spectacularly good.’ He continues, ‘They were good because they tended to do original science. Professional scientists tend to play it safe; they need to succeed and at studying what their employer endorses, which tempts them into doing experiments that are certain to produce results in fields that can ‘pay’. Similarly, grant-giving bodies which are accountable to government try only to give money for experiments that are likely to work. They represent the development of established science rather than the creation of the new. But the hobby scientist is unaccountable. He can follow the will-o'-the-wisp...’

Kealey begins with dismissing the ‘linear model’ of Francis Bacon, that government-funded science drives technology, by showing historically that the technological advancements of skilled, uneducated workers in England (such as Newcomen, who invented the steam engine) or the western European barbarians (who invented the saddle and domesticated the horse for farm use) drove technical advancement that led to scientific investigation. Basic science today contributes about 10 % to new technology;

⁶ This section draws strongly from http://www.analogzone.com/col_0210.htm a review of Kealey’s (1997) book by Dennis Feucht. See also http://www.scienceandyou.org/articles/ess_09.shtml

90 % is driven by existing technology, just as old science largely drives new science. Indeed Kealey argues that ‘the industrial revolution was created by men looking for solutions to very particular problems - men who had the economic freedom and the economic incentive to invest their time and resources in experimentation and development.’ Kealey further illustrates with Eli Whitney's cotton gin. Technical progress relied instead upon the inventiveness of local engineers relying upon technical know-how addressing here and now problems.

‘The irrelevance of academic science to technological or economic development during the eighteenth and nineteenth centuries can best be illustrated by comparing Britain and France.’ England only had two universities, Oxford and Cambridge, ‘mouldering into dust,’ in Oxford alumnus Edward Gibbon's (1737-94) words. In contrast, in France a generous State assured the best-equipped scientific laboratories in the world. By the early 19th century, engineering was only a skilled craft in England, but had been established as a profession, with schools and formal exams in France.

Yet, Kealey concludes, ‘it was Britain, not France, that produced the Industrial Revolution’, to understand why leads to an examination of the economics and history of science funding. The essential difference between the two countries was that the British government adopted laissez faire policies, whole classes of taxes were abolished, and government withdrew from almost any function except defence and justice. The Royal Society was left to sink or swim. In contrast, France embraced dirigisme and the State ran every aspect of French society. Yet Britain grew rich and France remained poor.

So Pure Science can also be driven by hobbyists i.e. the Bush Mechanic or Artificer. When Britain did turn to science, it was not funded by government but largely by hobbyists, industry, and private endowments of university science. Hobby scientists included Cavendish, Darwin, and William Parsons, Royal Society president from 1848-54. The increasing wealth of Britain enabled thousands who, due to low taxes and minimal government control, passionately took up science as a hobby. Kealey (1997) argues that neither Cavendish nor Darwin would have survived in a modern university any better than did Mitchell, yet they were scientific giants...’

Indeed Einstein, Barbara McClintock, Wilson, Penzias, and Bednorz were all Nobelists and all were either hobby scientists or were working on technical problems. Kealey opts for the alternative theory of Adam Smith over Bacon that science and technology flourish in countries with free markets lacking government subsidisation of either. He illustrates this thesis in some historic detail from the remarkable rise of England as a prosperous land, contrasted with countries on the continent which were dominated by government economic control.

The Shed as a mini Zone of Artificer Innovation towards the ‘bouleversement’ of Globalism. My argument is that this was the case at the beginning of the Industrial Revolution and still is – unfettered curiosity and freedom to pursue this drives innovation through lots of local level innovations rather than centralised Government sponsored top and trickle down research. Here the shed becomes a lone Zone of

Artificer Innovation (ZAI). This in my mind confirms the bushy is a genuine authentic subset of something that comes from a heritage that is a lot lot more than reactive, instrumental and derivative. The practical urge to innovate transcends the narrow and technical distinctions between pure and applied research and I believe goes to the nature of what it is to be human indeed a 'human right'. And in extension this ZAI represents a stage for a bouleversement of globalism though not modernity the shed is part of modernity's ethos of modern as in future-oriented rationalistic experimental zeitgeist. Armstrong (2000:40)

Appendix G: My Blogging is my Artifice!?

Computer work, artistic work, authoring, lecturing, teaching, thinking, reflecting and so forth is my action, my activism, my artifice. This series does not denigrate these processes/modes/modalities at all it simply seeks to make the point that these are not primarily physiospheric modalities of bring. Rather they typify modernity's strident and entrenched elevation of the cognitive over the manual, - the Noosphere over the Physiosphere, the Head over the Hand.

This eBook series essentially argues that all of these are cognitive modes that are denominated in at noospheric outputs and as such are not directly involved in the physiosphere.

Here the hand is seen as the extension of the head so to speak. Whereas I argue, throughout the extensive eBook series we have got it back to front. The reverse is the case whereby the **Head needs to be seen as the extension of the Hand.**

We see this in the ancient concept of 'techne' and extant indigenous cultures and in the evolutionary record of Homo Habilis some 2myBP with the brain size of a chimp yet anatomically modern human hand viz. humhand or handkind. In this regard the relationship is physiosphere ∞ noosphere with physiosphere prime because (1) of evolutionary evidence, (2) as in reverse discrimination because for two and a half millennia it has been noosphere >> physiosphere and (3) it takes around 10+ times as long to do something as to think about it yet we focus on the latter not the former for instance in the academe. So that in the case above the programmer could build the computer, the artist could make her canvass; the lecturer could make his podium etc.

From Analytical Scientific Method to a Synthetic Scientific Method

I would argue that we have applied the analytical or dis-aggregative or theory based scientific method to our world and existence however we have not developed a synthetical or interface or concrete experience scientific method and this is what we need urgently today. Possibly Artificer Inquiry offers one such synthetical approach an alternative Scientific Method – a Volk Scientific Method.

Appendix H: Parable of the Artificers Journey

It's like we are living in a tenement building which is falling to bits around us and with several of our friends can see this crack up and we yearn for an alternative. When we look out of our window we can see our destination in the distance or even across the road say on the same floor of another tenement building. Like we recognise a friend in a window of a nearby building but we can't go there unless we go down to ground floor journey to the other building then travel up to her level. After wards to return home we have to retrace this journey.⁷

We can't simply go there further we can't simply wish ethereal ourselves there somehow we have to get to there from here. First we must recognise this and second we have to go down to the ground floor before we can start our journey. This is analogous to a psychological deepening process – the first one. Once we do this then we can start the journey to our destination across the road then we travel up in the lift to her level (the second deepening process) and join her in her 'world'. When we wish to return home to spread the word so to speak we have to retrace this journey – a third and fourth depth experience.

⁷ The Neverending Story comes close to this process. In this fantasy world the nothing as the ghost in our Zeitgeist machine is eating our everything of the manifest world. Analogous to the hero's return story though different in several key attributes.

Appendix I: Examples of Artificers Related Educational Systems

Kibbutzim -

The Kibbutz originally were conceived as redeeming the Jewish nation through selfless work and personal sacrifice in basic labour – a back to basics approach. The first kibbutzniks hoped to be more than plain farmers in Palestine. They even hoped for more than a Jewish homeland there: they wanted to create a new type of society where there would be no exploitation of anyone and where all would be equal. The early kibbutzniks wanted to be both free from working for others and from the guilt of exploiting hired work. Thus was born the idea that Jews would band together, holding their property in common, ‘from each according to his ability, to each according to his needs’. Kibbutz political parties never called for the abolition of the market or private property. A type of an anarcho-syndicalist concept of the purity of basic labour abstracted from skill or specific human potential based on the trenchant belief of the supreme nobility of repetitive cleaning no matter what. Almost a detention centre mentality.

Russian System of Manual Training -

Some have asked how the Russians could have influenced our system of Technology Education. Victor Della-Vos, a Russian professor, developed the "Russian System" in the 1860's. He exhibited his method of training at various shows around the world in the late 1870's. In 1876, Della-Vos came to Philadelphia for such an exhibition. In attendance at this showing was John Runkle, the president of the Massachusetts Institute of Technology. Impressed with Della-Vos' methodology, Runkle spread the word to others throughout the country. So attractive was his organization of instruction that it spread from the east coast to the midwest and from higher education to secondary schools. Traditional teachers of the time opposed manual training and it gained its first foothold in the elementary grades and in private schools .

The Russian system had eight rules or principles, which are as follows:

1. Each distinct manufacturing process had its own course of instruction.
2. Each student was to have a workstation.
3. Each successive course was more difficult and had to be taken in sequence.
4. Each student made technical drawings of models.
5. Each student created his own model from his drawing.
6. The student did not progress to the next model before mastering the current model.
7. Grades awarded to students were relative to their stage in the course and not overall quality .
8. Instructors had to have a proficiency beyond that needed to teach the course at hand and were required to maintain an exemplary level of mastery.

<http://www.bsu.edu/web/shhoagland/1500's-1800's.html>

Educational Sloyd -

Sloyd (Slöjd) meaning in Russian handy or skilful, also known as Educational Sloyd, was a system of handicraft-based education started by Uno Cygnaeus in Finland in 1865. The system

was further refined and promoted worldwide, including adoption in the United States, until the early 20th Century. <http://en.wikipedia.org/wiki/Sloyd>

Montessori System -

The Montessori method is a child-centred alternative educational method for children, based on theories of child development originated by Italian educator Maria Montessori (1870-1952) in the late 19th and early 20th centuries. It is applied primarily in preschool and elementary school settings although some Montessori high schools exist.

The Montessori Method is characterised by an emphasis on **self-directed activity** on the part of the child and clinical observation on the part of the teacher (often called a director, directress, or guide rather than a teacher). It stresses the importance of adapting the child's learning environment to his or her developmental level, and of the role of physical activity in absorbing abstract concepts and practical skills. It is also characterized by the use of autodidactic (self-correcting) equipment for introduction and learning of various concepts.

In particular the MS recognises the importance of 'the practical life' **Practical Life**. This area is designed to help students develop a care for themselves, the environment, and each other. In the Primary years (3-6), children learn how to do things from pouring and scooping, using various kitchen utensils, washing dishes, polishing objects, scrubbing tables, and cleaning up. They also learn how to dress themselves, tie their shoes, wash their hands, and other various self-care needs. They learn these through a wide variety of materials and activities. While caring for yourself and your environment is an important part of Montessori Practical Life education in these years, it also presumes to prepare the child for more:

http://en.wikipedia.org/wiki/Montessori_method#Practical_Life

Steiner Education -

Overview of Steiner Education: Written by Bob Hale and Karen MacLean Last updated: 24 September, 2004 From Steiner Schools in Australia www.steiner-australia.org

Philosophy: Steiner schools have a unique and distinctive approach to educating children, aiming to enable each stage of growth to be fully and vividly enjoyed and experienced. They provide a balanced approach to the modern school curriculum. The academic, artistic and social aspects, or 'head, heart & hands', are treated as complementary facets of a single program of learning, allowing each to throw light on the others.

This is implemented by using art as a practice, and language to develop the feelings, by nourishing the children with the rich heritage of wise folk tales, histories, fairy stories, poems, music and games that are part of our world civilisation. This creates the cultural atmosphere in which the children are taught reading, writing, arithmetic, nature study, geography, science, languages, music and other subjects.

Steiner designed a curriculum that is responsive to the developmental phases of childhood and the nurturing of the child's imagination in a school environment. Steiner thought that schools should cater to the needs of the child rather than the demands of the government or economic forces, so he developed schools that encourage creativity and free-thinking. His teaching seeks to recognise the individuality of the child and through a balanced education, allows them to go into the world with confidence.

The need for imagination, a sense of truth and a feeling of responsibility – these are the three forces which are the very nerve of education. <http://www.steiner-australia.org/other/overview.html>

Ananda Marga -

Aims and Ideals of Neo-Humanist Education

To develop the full potential of each child: physical, mental and spiritual

To awaken a thirst for knowledge and love of learning

To equip students with academic and other skills necessary for higher education

To facilitate personal growth in areas such as morality, integrity, self-confidence, self-discipline and co-operation

To develop physical well-being and mental capabilities through yoga and concentration techniques, sports & play

To develop a sense of aesthetics and appreciation of culture through drama, dance, music, art

To encourage students to become active and responsible members of society

To promote an awareness of ecology in its broadest sense: i.e.. the realisation of the inter-relatedness of all things, and to encourage respect and care for all living beings

To encourage a universal outlook, free from discrimination based on religion, race, creed or sex

To recognise the importance of teachers and parents in setting an example.

<http://www.amriverschool.org/index1.php> Jitendrananda & Wildman (2003)

Hare Krishna -

Hare Krishna Playgroup: Just before the end of Term Four 2002 the Hare Krishna Playgroup started in the house of Hina and Pankaj Gandhi, 862 Dominion Road, Mt Roskill. Auckland New Zealand. The Playgroup is now closed for the Summer break and will open at the end of January. For further information contact – <mailto:pankajdiamond@hotmail.com> I hope this meets you well, Yours in the service of Krishna, Krsnendu dasa

Hare Krishna School: Thinking of enrolling in the Hare Krishna School or Hare Krishna Playgroup? Want to find out about... curriculum? school bus? school fees? future plans for the school? Come and have your questions answered!

Hare Krishna School is a state-integrated primary school that covers all subjects in the New Zealand Curriculum plus Sanskrit, Vedic culture and values in a rural setting. Bus transport is available every day from central suburbs (Sandringham, Mt Roskill etc.). Hare Krishna Playgroup provides early childhood education for children aged 3-5 years at two locations: Riverhead—Krishna conscious education for preschoolers in a rural setting. Mt Roskill—Krishna conscious preschool education in English and Hindi.

<http://www.hknet.org.nz/HKAuckland-page.htm#AboutHK>

Centre for Purposeful Living (CPC)

Center for Purposeful Living, Winston-Salem, NC (www.purposeful.org). Impressive organisation that harness volunteer energy extensively to assist in respite and care homes etc. Generally however the group's ethos has the view that volunteers do basic repetitive tasks (much like the conventional 'vollies stuff envelopes' approach) – this disrelates the group from the Artificer/Bush Mechanic. Their response is that such reduction of labour to its most

simplistic basic repetitive units is necessary as the principal task is spiritual service not temporal mastery. And maybe they have a point.....

Cumulative key prioritised prerequisite criteria for designing & evaluating socio-economic systems -

Some key prioritised prerequisite criteria for designing socio-economic systems are: PW ~ V4 @ 02-02-2009. Comm. 20-05-2008

1. **Exoteric**
2. **Secular**
3. **Convivial** (ultimately contextually Syntropic viz. entropic → Syntropic ← negentropic)
4. Efficaciously **glocal**
5. **Innovatory** inc. Schumpeter's creative destruction of capitalism with ethical market vitality
6. Operationally **technological** – HHH viz. Hand, Heart, Head
7. **Economically** physical (physico~prime)
8. Socially **integral**
9. Ontologically prima mobile axis mundi wise - **physiospheric** viz. physiospheric ∞ noospheric
10. **Democratically** Isonomic and equalitarian-ly inclusive
11. **Governancally** harmonising of diversity not centralising of conformity
12. **Holonomically** creatively evolvable – sustainable
13. Strong **agency** presence in Structure | Agency balance say 70 | 30 cp. present 90 | 10
14. Wise **proactive** Governance – acting ahead wisely
15. **Suburbo-topia** (has to work in civic society now starting from where we are now – living in the 'burbs)
16. **Rurban** ability to integrate rural and urban in town planning design)
17. **Transmodern**
18. **Syntropic (entropic→Syntropic←Negentropic)**

Scoring: nothing or no one is perfect indeed perfect means imperfect to be perfect – so that if we allow a score of 10 to mean achieved within this imperfect imperfection idea then a score of 6 out of 10 (i.e. 100 overall) of the 15 or so of the key parameters above would be required and substantial work undertaken where the score is 4 or less.

The key primary categories emergent 'grounded theory' wise from the criteria

In overview in grounded theory sense four primary categories emerge from the above, with Wisdom being the macro category that (a) includes the greatest number of the above criteria and that (b) the other three categories relate to viz.: **Wisdom** (1, 2, 4, 10, 11, 12, 14, 17) | **Mutual Aid Sustainability** (3, 4, 5, 8) | **Self-help and reliance skills** (5, 6, 7, 9, 13) | **Community socio-economic system to support this** (15, 16, 18).

Enter the Glocal Transmodern Quadrinity (GTQ) viz. the Actionista Quadrinity

For instance the **Actionista Quadrinity** of: Elder | eNuffer | Artificer | CED, judged on criteria No's 1-11, 13-14, 16-17 score 77+8+6+7+8=106.

EA's response to 'how then should we live together today to demonstrate that a better world is possible tomorrow for our children's children?' → the bouleversement of globalism

Here finally through the quadrinity we have at least an initial, limited yet I believe genuine, response to the question, indeed challenge: 'how then should we live together today to demonstrate that a better world is possible tomorrow for our children's children?', now reads as '*how (eNuffering) then should we live together today (CED) to demonstrate (artificer) today that a better (elder) world is possible tomorrow for our children's children?*'

From Educational Sloyd to GTQ to Educational Actionista (EA)

My Educational Actionista (EA) is short for the Glocal Transmodern Quadrinity (GTQ) of: Elder | eNuffer | Artificer | CED, coalescing around a central (series of age relative, formative and developmentally progressive, mentored) actionista Exemplar Project. **Actionista** is '*someone from the street who celebrates, while acting on their upfront refusal to stand by and instead chooses agency over submission to structure in order to take control, as far as practicable, over their own learning and thereby destiny, particularly in regard to practical learning that refers to matters ordinarily seen as beyond the power of individuals and one who believes and knows that they can change the course of history based on the power of their, and their peers' street bred street cred actionista actions*'.

The *Actionista Quadrinity* as above includes wisdom | self-reliance | DIY skills | sub-culture network marketing often web based. Actionista is not about acting as in jackarse type acting yet acting out of your box action e.g. young women seriously doing serious sports action in male dominated sports, can also be seen as GTQ manifest through CEC - Community Economy Conscientisation - layered re-localisation - barefoot, integral, wholistic, anticipatory, action-oriented, *animateurial* and *salutogtronics*. Also related to *fashionista* one who obsesses about fashion from within in that s'he makes her fashion statement clothes etc. Also related to '*barista*' one who excelled in the art of making good coffee. Another etymo-link from actionista is *actronics* and is anchored in the relevant (sub)cultural (electronic electrobopop) zeitgeist thus it articulates to *architectronics* even *anrhotectronics* and ultimately *actionistatectronics*.

I would hope that the term actionista is then both inspirationally heroic and transformationally counter-hegemonic.

http://video.google.com.au/videosearch?q=actionista&oe=utf-8&rls=org.mozilla.en-US:official&client=firefox-a&um=1&ie=UTF-8&sa=X&oi=video_result_group&resnum=4&ct=title# accessed 02-02-2009

Readers Note:

There are several styles of engaged yet esoteric education Ananda Marga, Steiner, Hare Krishna and so forth. In a sense Steiner is esoteric/a subset of Christianity and AM and HK are subsets of Hinduism. There are also many semi-religious groups and callings to service such as Mother Theresa, various types of monks (Buddhist, Christian, Islam, Waiters Guild, and so forth). Like Steiner however they are an esoteric spirituality which distils as per the founder's vision to the mundane world in terms of the educational systems we see today. This is not at essence a secular or ground up approach and as such is not directly covered in this piece. These deep educational systems however do demonstrate, intriguingly the importance of various aspects of

the artificer engaged process of learning. There are also various Anarco-syndicalist and other groups seeking forms of utopia.

Appendix J: What can people do today with the practically of the Bushy?

What can folk do now practically using the bushy approach? [Tbfd – To Be Further Developed]

The practical Bush Mechanic today

What can folk do now practically using the bushy approach?

Here is my take:

- (1) Realise that doing things practically with your hands **matters** and people who ‘do things with their hands – **matter**’ and ‘doing things with (y)our hands with and for people who do things with ‘their hands’ **matters** and is here to stay’ going to be a whole lot more important now than a year ago and will be so for the next few years
- (2) **Getting on the four step Bushy Path:**
 - (1) **Start to do something with your hands** anything (gardening, cooking, hobby, fixing things, DIY, seamstress-ing, metal work, wood work, mechanic-ing etc.), repairing things, reusing things, including your feet as in walking, riding etc and so on)
 - (2) **see how it goes and look around and discuss with friends** and if possible get your practical project to assist them and get their involvement – put pictures of you working with your hands on your fridge so you can get a buzz from your own ‘handiness’ each time you go to the fridge. Don’t just talk to folk who are doing the same thing with their hands as you e.g. other gardeners talk also to other folk who are doing things with their hands that’s the common link *not what you do* but *what you do it with* as well that matters
 - (3) **then link your practical project with the big picture** of your community/town even Australia (even Brisbane Lord Mayor is saying get tank, ride a bike and grow a garden these days – good on you Campbell Newman, I say)
 - (4) now **hook in your children and grand children** in the project and let them see hands on what you have learnt and back to (1) again.

Now you’re on the Bushy Path.
- (3) Once you get a feel for this look around have you come across someone who does this spectacularly well – if so its likely s’he is a bush mechanic – pull alongside them and listen to their stories – they have a huge amount you can learn from – then apply these lessons in your practical project.
- (4) There are heaps of resources out there – books on practical living, growing your own community economy and garden, recession guide. Many good ones come from the ‘banana’ recession Australia had in 1987 – these books are now very cheap to buy at second hand book stores.

(5) Please note a ***Recession Guide*** [<http://www.localmarketeconomy.org/>] may well turn into a ***Depression Guide*** (over the next year or so – hopefully we avoid this) then a ***Transition Guide*** (over the next few years – hopefully)

(6) ***Depression Guide*** – see below.

The Practical Bushy's Depression Guide – *managing uncertainty upwards*

In mid 1974 I (Paul Wildman) interviewed my parents and their friends (about 10 in all) that had gone through the Great Depression (1929-1934) when unemployment levels in Australia were about 30% (in a population of 6.5 million) for **economic survival lessons to be learnt for the future from the depression** there from. Now, of course, they are all long dead. These are listed below. This was also for an assignment in my micro economics degree (second year 1973) at Univ of Qld, ultimately becoming honours with a specialisation in Regional Economics for which this information was used in relation to optimum city/urban settlement size. Little did I know that some 35 years later it would be come relevant again?

There is nothing really earth shattering in the results. On reflection these all have played a strong background influencing role in my upbringing and influence my psychology and approach to life cycle planning to this day and have actively contributed to my decision at 27 to commit to saving enough by 55 to protire. Some recent ones have been added, that fit in and from the originals.

They do however point to prudent oikonomia i.e. management of the home (often female – I call this nurturing economics) cp. chrematistics i.e. love of money and speculative gain (often male – I call this the economics of big projects).

These are the principal points:

1. **Have a dependable Income** – become a public servant get a Govt job, have a practical tradable skill
2. **Grow your own veges**, eggs etc. in your back yard – families lived off lots of 500 sq mtrs
3. **Manage and Minimise your debt** and expenditure esp. minimise your debt
4. **Swap with others**- barter, quid pro quo etc.
5. **Become a bush mechanic** - DIY etc. cp. 16
6. **Help others** less fortunate than yourself – mutual aid
7. **Don't speculate or gamble or drink** – a bit of Methodist temperance here
8. **Reuse** (e.g. paper and wash plastic bags, save milk bottle tops)
9. **Fix** (don't throw away) – use your ingenuity – recycle – bush mechanic
10. **Save/Keep for a rainy day** (hoard) – don't trust the banks
11. **Don't touch your savings** – they are for a rainy day and keep adding to them
12. **Live frugally** respect suffering and struggle and god and help others
13. **Own your own house** – buy second hand and fix rather than go into debt
14. **Participate in a local economy** - barter, local currency, local market, skills, - kash or kind etc.
15. **Learn from your experiences** - KAL, participatory learning
16. **Innovative Fixing** – Bush Mechanic lore of innovative fixing was always good, and brought about by necessity (being the mother of invention) [Joan Cook 84; 03-10-2008]] cp. 5
17. **Good Mothering** - the role of mother in those days was critical. Families with a 'good mother' manager encouraging frugality self reliance with compassion and encouragement and help for the needy, always survived, and fathers were thereby more often than not subsequently inspired and required to also go out and find something to do.

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