

# **Engaging Poststructuralism: Proactivating and Broadening Causal Layered Analysis (CLA) to Causal Layered Synthesis (CLS) through its application to Pedagogy by introducing the Causal Layered Matrix (CLM)**

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## ***Introduction***

This article<sup>1</sup> seeks to undertake several tasks: (1) broaden and extend Causal Layered Analysis to include synthesis (Causal Layered Synthesis)<sup>2</sup>; (2) include action (Futuring); while (3) incorporating Wilber's four quadrant analysis in this broadening; and finally to (4) concretise these with an example, in this instance Pedagogy which is applied in relation to the West and more particularly in regard to Australia with its current centralising pedagogical transformation.

In recognition of the task at hand 'synthesis' as well as the content 'action' I seek to use the workshop manual approach whereby we take say a carburettor and explode it into its constituent parts in order for someone to understand how the carburettor works or to repair one for instance. Here the carburettor is the four tables and the explication as to how the carburettor works and how to repair/apply one follows in the detailed explication of the tables taxons/cells.

As such the article technical a technical turn rather than say a post-modern one whereby the methodology would be situated, critiqued and related to associated methodologies. Even moreso this article details the application of the methodology through one example surely there could and ultimately should be more however space does not permit a thorough 'for instance' application in this first instance in more than one case study. Surely there are other carburettors however this article is not about that, rather it is about this particular carburettor/methodology and how to better understand, disassemble and reassemble it. Further application of this methodology in say the areas of technology, governance and health<sup>3</sup> would be a 'natural' extension of this example in this piece – pedagogy. Such 'situating' and 'further applications' would be a delightful outcome of some positive reaction and even acceptance of this paper.

I remain slightly hopeful that this could happen.

### ***Background to this Article***

Here I seek in some small way to further the discussion of CLA and to enhance its relevance to our global problematique.<sup>4</sup> Today we have many analyses of our global problem and many 'from here out' type responses whether it be replacing ozone in the upper atmosphere, sequestering carbon, bio char, 350.org, carbon pollution reduction taxation and trading and so forth<sup>5</sup>. Often these seem more aimed at political expedience, even emergency, than the long term welfare of Gaia.

We futurists have a great opportunity here to demonstrate the 'practical-ness' of our theories. Yet few of us have sought to synthesise these and our analyses and to live that synthesis as an exemplar, even elixir, of our theories. That is as futurists, I suggest, we need to seek to 'walk our talk'.<sup>6</sup> To do this we need: (1) strong tools of analysis and I suggest CLA is one 'strong' such deep futures analysis tools, (2) tools for exploring this analysis in terms of a proactive perspective and I suggest 'futuring' is one such tool<sup>7</sup>, and (3) tools for synthesis of the outcomes of this analysis and exploration, and one such tool is, I submit, CLS or Causal Layered Synthesis. Finally a term I have developed for this whole circular process, or more

correctly rectangular process, is CLM or Causal Layered Matrix. This is progressively illustrated in the following tables (especially Tables 4a, b, c).

### *Aims of this Article*

In addition to the above 'futuring' challenge to CLA (above) this article is in effect, also seeks to be an inclusive rejoinder to the Integral Studies (IS) dual issues of AQAL (All Quadrants All Levels) and IS's two way contestation with CLA as codified in the Special Issue of Futures entitled 'Epistemological Pluralism in Futures Studies', V42, No. 2 March 2010 edited by Sohail Inayatullah. In turn this edition was largely referent to the Special Issues of Futures entitled 'Integral Futures', V40 No. 2. March 2008. In this article then, I seek to outline the efficacy of certain aspects of 'Integralism' to CLA as well as expanding CLA to include a synthesis moment. This approach is only one such approach and is meant to imply neither uniqueness nor primacy, only an attempt to illustrate one method of cycling CLA back up to the Litany Level.

In order to respond to the challenges outlined in the Special Issue of Futures on Epistemological Pluralism and also to integrate synthesis I will seek to develop the concept of 'Causal Layered Synthesis' or CLS. This article is designed as one response to the 'action' questions often asked, when one has used the CLA method of applied poststructuralism and deconstructed a litany issue in this instance pedagogy, we ask the 'what's next' or 'where to now', or 'how can we do or be this new myth', or even 'so what do I do differently right here right now' questions? Here we take the turn into praxis into 'walking our talking'.

In order to illustrate this CLS process and to seek to meet the two above tasks this article will use the case in point of Pedagogy and more particular conventional or status quo pedagogy. Pedagogy according to Alexander (2001:152) indicates is a key determinant of our social structures and in turn, our civic space in the generation from when children enter preschool i.e. from 4 to 24 years. As such any decision to adapt our social and civic structures needs must address this oft ignored fatal lacuna in our social system.

That is the lags in pedagogy are inter-generational and whereas environmental, political and technological change can be manifest over a period of several years, and technological change over a few months even especially in the CIT (Communications and Information Technology arena) social change, however takes at least a generation for those in school to be in positions of political power and then beyond to several generations for curriculum priorities, classroom structuring and so forth to change. For me this makes pedagogy 'The contemporary AND futures issue of our generation, as pedagogy today lays the foundation of social possibilities for tomorrow, yet it itself remains almost intransigent to change.

Nevertheless Pedagogy is simultaneously the most important and yet **least spoken about or acted on futures topic** I know of today.

### *Some initial definitions*

For the purposes of this article 'p'edagogy is generally meant: *what we teach children*. 'P'edaogy then is *the system of formal education and training* or *erziehungsroman* in German. In this article both are used. So Status Quo 'p'edagogy may be defined as: *the status quo process in a society by which we teach children in school what we want child to*

*learn*. Alexander (2001:152, 540-542). Writ large, small ‘p’edagogy becomes large ‘P’edagogy whereby school becomes educational infrastructure inc. different types of schools and their administration, while children become kids (pre-schoolers) and children, adolescents and adults. In effect small ‘p’ may be seen as the outcome of big ‘P’. Thus ‘p’edagogy is nested holonically in ‘P’edagogy and ultimately in our social system.<sup>8</sup>

What we teach includes the:

- (1) process we use i.e. the political process of governance and authority, compulsory attendance
- (2) content of the process i.e. the curriculum
- (3) the way we teach it i.e. the student teacher relationship
- (4) location where we teach it i.e. schools with classrooms and headmasters etc.
- (5) key attributes thereof viz. the epistemic theoretical and pedagogical attributes of the received curriculum/doxa i.e. the theories and implicit beliefs about what it is to be human and learn, the separation of thinking and doing of mind and matter
- (6) age-cohort groupings categorised such as graded classes, with grades then aggregated into pre-primary-high-higher (uni.)~school and, higher ed., general ed., vocational ed. and special ed.
- (7) level of duress i.e. the level of, and justification for compulsion, to and in pedagogy, in a free society esp. when community, parents and children have no input into curriculum priorities<sup>9</sup>
- (8) hidden aspects of curriculum i.e. the ‘3R’s’ of the tacit curriculum of Routine, Rule and Ritual, embedded and naturalised aspects of these; and
- (9) ends of pedagogy that is the type of society/culture and world that pedagogy seeks to reify and in turn to draw from for its student fodder.

These decisions, currently, are made centrally for children and parents by elite bureaucrats far removed from the communities they supposedly serve, and from where the children come. Indeed presently (2010) in many remote indigenous communities of Australia children and families come under huge duress with threat of imprisonment of parents and garnisheeing 50% of their income unless they compel their children to submit to this incarceration in what, I argue, are no better than detention centres<sup>10</sup>.

In its broadest sense then, pedagogy is about *what we want people (of all ages) to learn and how they will be taught this*. Consequently this covers preschool to Doctorates (vertical) and TAFE (Technical and Further Education) to Higher and General Education (horizontal), indeed in the UK mold this now includes ACE (Adult and Community Education).

### ***Applying CLA to Pedagogy***

In seeking to undertake a CLA on Pedagogy the first ‘station’ we explore will be an actual CLA thereon as presented in the table (Table 1) below.<sup>11</sup> Then, in a complementary mode, I seek to outline a Wilberian four quadrant explication of Pedagogy in the subsequent table (Table 2). Next, in the third table (Table 3) I seek to identify pedagogical scenarios and their resilience when confronted with socio-economic perturbations in order to identify key issues facing pedagogy over the next generation given the likelihood of ongoing significant socio-economic-ecological (socio-eco) perturbations. Finally I seek to take these analyses and

insights, and process them through a proactive approach to futures called ‘futuring’ and then reinstall them into an enhanced CLA process I call Causal Layered Synthesis (Tables 4a, b and c).

### **T1: CLA on Pedagogy**

**Table 1: CLA on Pedagogy**

CLA*	Pedagogy**	Comments
<b>Litany</b>	School buildings & students, separate from the community – single use buildings	Artefacts of the received doxa: such as time tables, school buildings, awards
<b>Systems</b>	Nation State based, age based cohorts, noospherically valorised curriculum & teaching protocols & professions; appropriation of students & cultures agentic time	Systems of the status quo such as bureaucracy with the fine grain of the regulators mind with assessment being textualised
<b>Worldview</b>	Pedagogy is ‘naturalised’. One that separates thinking & doing, mind & matter, economic rationalist, structuralist, objectified curricula separate from the ‘lived life of the student’	The Nation State has a ‘natural’ right to compel its citizens without recourse & under threat of jail or income maintenance, to compel their children to attend, school; & the NS has a ‘naturalised’ monopoly on credentialing the Status Quo; based on power over, not power with, pedagogy
<b>Myth</b>	‘Things can only get better’ i.e. the Enlightenment is ‘T’he Go – the only way forward. Father knows best.	Here the experiment of the 15thC Enlightenment continues with its valorisation of thinking cp. doing, even though this has led from Harvard to Auschwitz and Abu Gharib & the GFC & Global Warming. Few questions the myth, the elephant in the room of ‘why we think it is so’ i.e. pedagogy.

**Source:** P. Wildman: 02-2010. V4. \* Dick (1994:28-30) also uses a four layer onion model for cultural analysis, an analogue of CLA, see Endnote 4. \*\* Pedagogy as used here refers to what may be called ‘Status Quo or Conventional Pedagogy’ (SQP) viz. the school systems for instance in Australia and as explicated by Alexander (2001). Again there pedagogy is used in the ‘P’ sense of ‘what we want people to learn’.

### **Observations on Table 1**

**1:** Here are other types of pedagogy such as mentoring, family, self, tacit, peer, experiential, Steiner, Riggo, Montessori, Artificer and so forth. Wildman (2008), (2010). My own area is Androgogy (Adult Learning) and through my wife our business practice has also has extensive experience in ‘p’edagogy – kids learning viz. [www.kal.net.au](http://www.kal.net.au) . Nowadays alternative pedagogies such as these are largely silenced.

**2:** Pedagogy in the sense of this article includes Androgogy and ‘p’edagogy (vertical) as well as TAFE and University for instance (horizontal).

**3:** In our practice we seek to develop actual practical examples of how Kids and Adults Learning can occur as a counterpoint to Status Quo Pedagogy. Here we seek to: *demonstrate practically a vertically integrated developmental chiro-pedagogy which can demonstrate that a better world is possible tomorrow for our children.* Generally speaking there are only a few sites globally where this challenge is engaged (see Endnote 6). Default to SQP and the silencing of the voices of the alternative pedagogies, mentioned above, is of enormous concern to me but alas, I fear, few others.

## T2: Wilberian Four Quadrant Map of Pedagogy

**Table 2: Wilberian Four Quadrant Map of Pedagogy**


	Inner	Outer
Self	NA - not part of conventional Pedagogy	Diplomas, Degrees, Gowns, Status, professional organisations etc.
Collective	Zest to learn, understand & contribute e.g. Adult and <b>Community</b> Learning	Part of Nation State Governance training youth to be worker bees; Contrib. to international productivity

Source: P. Wildman: 02-2010. V1. Wilber (1995: 122, 193). NB: this table is for Western Status Quo Pedagogy.

## T3: A Four Scenario Approach to Identifying Pedagogy Options for the next two decades in response to global socio-economic perturbation

**Table 3: A Four Scenario Approach to Identifying Pedagogy Options for the next two decades in response to global socio-economic perturbation**

	Less Efficacious Response	More Efficacious Response
Adapting to Perturbation	<b>[S1] B2B Scenario</b> ( <i>Back To Basics</i> - Return to Eden/the Good Old Times): To be adaptive the '3R's' of Reading, wRiting and aRithmetic* would need to become at least '5R's' & inc. oRacy (speaking) <sup>12</sup> and Ram for computer RAM. Even '10R's' including Relationship, Rendering (art & craft – home economics) & Renegotiating (participation in school power structures & thus decision making), Resisting (understanding how power systems work & how to 'adjust' them) & spirituality that brings all this together	<b>[S2] T Scenario</b> ( <i>Transformative</i> ): Alternative and potentially transformational secular Pedagogy e.g. Chiro-Pedagogy, Eco-Pedagogy e.g. Steiner, Neohumanism**
Not adapting to Perturbation	<b>[S4] BAU Scenario</b> ( <i>Business As Usual</i> - <u>Status Quo Pedagogy</u> ): greater regulation – Australian Curriculum, Assessment and Reporting Authority (ACARA), T4T = Teach For Test viz. Aust NAPLAN (National Assessment Program – Literacy & Numeracy)	<b>[S3] CAB Scenario</b> ( <i>Crash &amp; Burn</i> – Apocalypse): Parents & students desert conventional pedagogy through <b>drop-out</b> rates***, truancy etc. leading to laws imprisoning parents for not forcing their children to attend & income maintenance esp. in Indigenous Communities that halve the income in order to control what people spend their resources on to force them to send their children to 'white fellas' school – 'heads you lose tails I win'. See the struggles. of the Ampilatwatja community protest camp <a href="http://www.interventionwalkoff.wordpress.com">www.interventionwalkoff.wordpress.com</a>

Source: P. Wildman: 02-2010. V1. \* in ancient terms (>8000BP – prior to agriculture as we know it) these '3R's' can be seen to represent 'yang' or male intelligence whereas music, art and community viz. 'yin' intelligence is all but obliterated today 2500BP to present. Thus the importance of the exemplar project in Artificer Learning pedagogy, one that is simultaneously ancient and modern, yin and yang, left and right brained respectively. Here the head (yang), heart (yin) is expressed through the hand ('ying'), Exemplar Project, or . Also the '3R's' in the context of the hidden curriculum mean, for instance, the '3R's' of Routine, Rule and Ritual which, I would expand to '5R's' to include Regimentation and Regurgitation. See also Alexander (2001:380). \*\* Inayatullah, S., M. Bussey, and I. Milojevic. (2006), \*\*\* also includes pull-out (parents pull their kids out of school to help around the farm/community/home/family), push-out (pedagogy unsuitable to indigenous culture) and stay-out (where pedagogy is frightening to children and parents and the children stay away through fear/threats) situations.

### Observations on Table 3

1: Status Quo Pedagogy as with Table 2 relates primarily to [S4] in this table.

2: [S1] although foundationally Status Quo Pedagogy has the elements of transformation added to it with the transition from the '3R's', through the '5R's' to the '10R's' so in this

table [S1] is considered as status quo rather than transformational as such, although the two overlap.

### ***Futuring: Extending CLA to Causal Layered Synthesis (CLS) to form the Causal Layered Matrix (CLM)***

In this section I seek to extend the CLA analysis to include a system of layered synthesis in order for us to bring our learning's from the 'drill down' CLA process back to the day today litany life we are immersed in. So that we can hopefully be empowered to undertake some emancipatory actions viz. Futuring or Critical Futures Praxis, in order to respond to the challenge of 'how then shall we live together today in order to demonstrate to our children that a better world is possible tomorrow?'

To do this I seek to apply CLS to Status Quo Pedagogy. I do this by taking the SQP of Table 1 and S4 in Table three and lens it through Wilber's four quadrants of Table 2 then use apply Futuring and CLS respectively to the outcome.

CLS then, represents the move through these four 'moments' from analysis through praxis to synthesis back again through praxis to analysis. For example *breath*: breathe out ~ pause ~ breathe in ~ pause; and the *heart*: pause ~ systolic (contraction) ~diastolic (pause) ~ systolic (contraction). That is from CLA through Futuring to CLS and back. Here we introduce the four interactive horizontal dimensions of Futuring viz. praxis, acting ahead wisely, synergy and learning. And when combined with the four interactive dimensions of CLA/CLS we have what I call the Causal Layered Matrix (CLM). These general categories are outlined in the table below (Table 4a) and applied in the subsequent table (Table 4b).<sup>13</sup>

#### ***T4a: Causal Layered Matrix - outline***

**Table 4a: Causal Layered Matrix - outline**

CLM							
<b>Talk the Walk</b>						<b>Walk the Walk</b>	
	<b>CLA</b>	<b>Experience</b>	<b>Intention</b>	<b>Process</b>	<b>Action Learning</b>	<b>CLS</b>	
	Events					Events	
	Systems					Systems	
	Worldview					World view	
	Myth					Myth	
	<b>Futuring</b>	<b>Praxis</b>	<b>Prohairesis</b>	<b>Synergy</b>	<b>Consciousness</b>	<b>Futuring</b>	
	Example					Example	
<b>Talk the Talk</b>						<b>Walk the Talk</b>	

Source: P Wildman (2004:5).

#### **Observations on Table 4a**

**1<sup>st</sup> Moment: CLA** Causal Layered Analysis includes: Events/Litany actual events and reports thereof in the press; Systems – structural arrangements in society that produce the events – similar to sociology; Worldview – knowledge system that underpins the systems – similar to epistemology and philosophy; Myth – symbolic understanding of the story behind the worldview similar to cosmology (in that order).

**2<sup>nd</sup> Moment: Futuring** in short is acting ahead wisely or Prohairesis/practical intention,



which from my work includes: Experience (a retrospective), Wise Decision-making (prohairesis), Synergising with surrounding systems so that  $1+1>2$  and finally, Action combined with Learning which can provide a deeper inner ↔ outer understanding of our world and our place therein - (bottom purple line). NB: these are not mutually exclusive nor are they necessarily sequential.

**3<sup>rd</sup> Moment: CLS** ↑ Causal Layered Synthesis the reverse or reciprocal process to CLA viz. Myth; Worldview; Systems, Litany (in that order)

**4<sup>th</sup> Moment: Futuring** ↔ the reciprocal process to the 2<sup>nd</sup> Moment - (top purple line), viz. Action Learning, Process, Intention and Experience. NB: these moments are not mutually exclusive nor are they necessarily sequential.

We now seek to populate this modal/taxonomy with the practical example of pedagogy, if I may with some repetition hopefully to better explain, and hopefully understand, this methodology.

#### *T4b: ALADIN: From Causal Layered Analysis(CLA) to Causal Layered Synthesis (CLS) to Causal Layered Matrix (CLM)*

**Table 4b: ALADIN: Causal Layered Matrix (CLM) on Pedagogy applied (CLA+Futuring+CLS=CLM)**


CLM							
Talk the Walk							Walk the Talk
	CLA ↓	Experience	Intention	Process	Learning	CLS ↑	
↓	Events	Classwork	Curriculum	Didactic	'R'ote & 'W'rote—largely uncritical 'T'extualisation	Events	↑
	Systems	Certification	Compliance	Specialisation	Credentialing viz. School, Uni, TAFE	Systems	
	World-View	Noospheric Hierarchy trumps all: Thinking trumps Doing, silenced 'voices' of 'other'	Reify Sage on Stage as part of socialisation for consumption	Nation State valorisation	Taylorism, behaviourism & economic rationalism, international competition School as adjunct to market	World-View	
	Myth	Regulation leads to liberation, hierarchy is the 'only' way to organise & regulate	Curriculum leads to +ve conformity	Governance has to be 'naturally' top down	Compliance & credentials gives jobs & status	Myth	
	Futuring→	Praxis/Artificer	Prohairesis	Synergy	Consciousness	←Futuring	
	Example	An actual path breaking Project e.g. Ghandi's salt walk, Ananda Marga Master Unit, eco-village, MLKings civil rights 'freedom' march, or the moon project – Walt Disney's 'Tomorrow World', eco-village	Decisions for a 'futuring' project today to show today how we can live together to demonstrate practically that a better world tomorrow is possible for our children	Planning & design that brings together: 1 Economic sustainability, 2 Social Sus, 3 Environ Sus together in an eco-village or master unit. a green car etc. So $1+1+1= >3$	Memoirs, manual, autobiography, National Curriculum, NAPLAN League Tables comparing school 'performance', redesigned Master Units, an Eco Village,	Example	
Talk the Talk							Walk the Talk


**Source:** P Wildman 02-2010 comm. P Wildman (2004) and (2005a). **NB:** Futuring A, P, S, C through CLS to Futuring of L, P, I, E viz. A, P, S, C i.e. Artificer, Prohairesis, Synergy, Consciousness as (Action) Learning respectively. These two groups are two interchangeable and congruent, even yang, yin respectively, ways of looking at the four moments of Futuring. ALADIN – All Layers, All Dimensions IN matrix i.e. CLM.



## Observations on Table 4b

1: Pedagogy here means Status Quo Pedagogy as outlined previously.

2: **CLA**  **Causal Layered Analysis:** Events/Litany actual events and reports thereof in the press; Systems – structural arrangements in society that produce the events – similar to sociology; Worldview – knowledge system that underpins the systems – similar to epistemology and philosophy; Myth – symbolic understanding of the story behind the worldview, similar to cosmology. See also Inayatullah (1998).

3: **Futuring:**  The *Futuring* process is based on my work Wildman (1997), (2005a), (2008), (2010), here *Futuring*<sup>14</sup> in this fuller sense means proactive futures oriented work that seeks to answer the following question: *How then should we live, lean and love together today in order to demonstrate practically to our children that a better world is possible tomorrow?* Clearly embedded in this question are these four crucial dimensions of: experience (demonstrated practically), intention (a better world is possible), process (how then are we to live together today), learning (life based learning). In some regards this is an analogue of Kolb's (1984) work and also draws from my epistemological work with Inayatullah. Wildman and Inayatullah (1996).

More fully these four dimensions of futuring can be seen as joining up practice and reflection; prohairesis an ancient Greek word meaning 'deciding ahead wisely' (no English equivalent, prudence comes closest but misses by a lot), I would interpret prohairesis as 'acting ahead wisely'. In effect we can see the negative version of this concept today in 'the war on terror' whereby whole societies, if you're not for us your against us, are socially engineered on the principle of fear to 'future proof' them (sic!).<sup>15</sup>

On the other hand we have the Global Waring debate (War on terror), paralleling the Global Warming debate (War on climate and oil spills). Here pre-emptive justice argues that we have to act now as waiting till the evidence is incontrovertible (if ever that could happen) will be too late. Massive centralised pre-emptive punitive actions have been taken in the former instance and almost nothing, not even reactive actions, in the latter. And where this has been attempted on the ground competing bureaucracy's have ensured the actual assistance is minimised, compartmentalised and not synthesised.<sup>16</sup> Thus we see the tragedy of our times emerging where our future has been 'othered' to a violent 'other' that needs to be killed or 'capped' or taxed in order to future proof from today's bogymen. We, the Volk, the climate and the terrorists have been 'othered'.

While the best we have to believe in is 'consumption' i.e. essentially nothing. Whereas these 'othered selves', even our 'rejected selves' have coherent robust resilient belief systems that allow their adherents to believe 'in something'<sup>17</sup>. Our grandchildren will either succumb, or have to unravel our mess from today, a sort of backcast intergenerational 'minority report'<sup>18</sup> a form of prohairestic or futuring first aid. I suspect they will succumb to the mess we have left...

Prohairesis is, to my mind, substantially different from the so-called 'precautionary principle' in that in many ways wisdom is, and needs to be seen as, the counterpoint to precaution, especially when precaution is based on 'imagined' fear of the future based on, these our

‘othered selves’. Further the term includes and proactively extends Phronesis as ethical practical action, synergy the positive sum game that emerges from the interaction and interconnectivity of these ‘areas of practice’. Consciousness through learning by reflexion through this ‘futuring’ process’ being increasingly aware of the horizontal and verticality perspectives of this praxis based learning.

**4: CLM - Causal Layered Matrix = Causal Layered Synthesis** contains in my view four primary moments identified in Table 4a of: (1) the vertical depth process of CLA, (2) the horizontal Futuring process of LPIE, (3) the synthesis process of Causal Layered Synthesis (CLS) that is based on reversing the initial CLA depth process viz. from ESWM↓ to MWSE↑, and finally (4) to the reciprocal futuring process of APSC. This broader four moment process I call the Causal Layered Matrix (illustrated in the above table – Table 4b) CLM.

**5: CLS – Causal Layered Synthesis** – represents the re-emergence into the lived life viz. our everyday world from the depth process of CLA followed by the learning process of Futuring and the creative process of CLS. In this sense CLS reprises the four stages of CLS so we move from Myth to World view to Systems to Litany/Events.

**6:** In this article I use the term CLS in its boarder sense to represent the CLM as CLM would not exist without the synthesis process described above. So CLS in this sense = ALAD or as I suggest **ALADIN - All Layers All Dimensions IN matrix**. This may be considered as a counterpoint to Wilber’s AQAL Mnemonic (All Quadrants All Levels).

**7: Walk the Talk** – actual illustrative CLS methodologies (see Table 4c below)

#### *T4c: Walk the Talk – Identifying some CLS methodologies*

**Table 4c: Walk the Talk - CLS methodologies (an expansion of the far Right Hand Column of Table 4b)**

CLS Stage	Examples of methodologies	Authors respectively
← Futuring (to CLA)		
<b>Litany</b> ↑	(1) Strategic Planning, operational planning, action planning, action, action learning (2) Media (3) Artificering	(3) Wildman (2005 – exemplar project)
<b>Systems</b> ↑	(1) Systems Design (2) Strategic planning (3) Articles of Association and Incorporation for NGO’s (4) Emerging Issue Analysis	(3) Meadows (1972) (2) Laslo (2001) (3a) Wheatley (1999) (3b) Pacey and Wildman (2004) (4) Molitor (1980)
<b>WorldView</b> ↑	(1) Macro History (2) Constitution and meta-constitution (3) Reflexive Praxis (4) Critical Futures Praxis (5) Holons and Fractal geometry	(1) Galtung and Inayatullah (1997) (2) Mochelle (2001) (3) Wildman (1995) (4) Dick and Wildman (2005) (5) Koestler (1978); Peitgen and Richter (1986)
<b>Myth</b> ↑	Zeitgeist*, (1) Cultural Design (2) Nature unlimited (3) The deep story or myth behind ones research question and thesis i.e. the Esoteric Thesis	Essence/sprit of our times (1) Jantsch (1975) (2) McKibben (2010) (see NB:4) (3) Wildman and Cundy (2002)
→ Futuring (to CLS)		

**Source:** P Wildman (Q2: 2010). \* President Obama's chief economic adviser Larry Summers 'There are no limits to the carrying capacity of the earth that are likely to bind any time in the foreseeable future. There isn't a risk of apocalypse due to global warming or anything else. The idea that we should put limits on growth because of some natural limit is a profound error'. McKibben (2010:95). NB1: these methodologies are illustrative only. NB2: furthermore depending on 'task at hand' to a certain extent, one can enter between the various CLS Stages. NB3: a more extensive taxonomy could be generated, in each of these four CLA layers, for each of the futuring dimensions as noted in Table 4a& b, this would overly complicate the matter for this paper NB4: in a sense CLA itself may be seen holonistically as we move down each layer is nested in the next (see also Endnote 8).

### *A word of caution*

Following a recent presentation my wife and I did on our combined fifty years experience of pedagogy Wildman and Cunado-Wildman (2010), six primary trends therein that we spoke of and have been discussed in this piece are now confirmed viz. the:

- (1) Selection of the BAU Business As Usual Pedagogy Scenario (Scenario 4 in Table 3), and explicated in this paper, has been confirmed with the announcement of prescriptive top down academic cp. developmental national curricula from preschool to University and TAFE
- (2) Emergence, rise and rise of the punitive regulator - ACARA (Australian Curriculum Assessment and Reporting Authority) with its MySchool website where quality is elided into quantity and learning into performativity and the establishment of comparative league tables <sup>19</sup>
- (3) Replacement of play based developmental pedagogy in early childhood (pre-school) with academic curricula based on the epistemological structures of University viz. maths, science, history and English
- (4) NAPLAN (National Assessment Program in Literacy and Numeracy) results to influence teachers' salaries and promotional prospects with consequence that schools 'T4T' – Teach For Test <sup>16</sup>
- (5) NAPLAN to be policed and is becoming the educational equivalent of drug testing – that is given the above, teachers and schools seek to 'adjust' the test results prior to them being recorded. This is now to be 'policed and investigated' by pedagogical police because once something becomes competitive such as sports, drugs to enhance that performance rush in, and the 'doping up' or in this case 'dumbing down' race is on <sup>20</sup>
- (6) Every parent wants one (at least) – such that childcare licensees, parents and academics have almost all capitulated to the above and want testing and 'standards' and 'quality' and a national curriculum and all that brings with it.

For us these six represent a perfect storm indeed ones worst nightmare scenario of where the Ghosts of the Industrial Revolution visit our grandchildren, remake the world in its own likeness and in the process destroy it even further.<sup>21</sup>

Recently I asked a dozen folk attending our Brisbane Hot Futures meeting on pedagogy (basically all are professionals, activists and academics), to nominate their top five issues, in order of priority, in the global problematique that, in their opinion, need to be addressed within the next generation. Surprisingly (for me that is) none listed Pedagogy high up on their list and only one had it as no. 3, with 5 respondents not even listing it. Basically on average it didn't even list in the top five.<sup>22</sup>

It may well be that the global state of emergency that we find ourselves in and has now gripped most of the cognoscenti, precludes any such longer term considerations. It may well be that they see their pedagogical boat rising along with the regulation and centralisation.

Also it maybe that folks just want to stop the CO<sub>2</sub> and will seek out immediate, technical ‘silver bullet’, e.g. shoot ozone into the atmosphere in a ‘silver rocket bullet’ etc., remedies today rather than start a longer term process that will bear fruit and vegetables tomorrow i.e. buy carrots rather than plant them.

Possibly and most disturbingly it may well be that folks generally including parents, teachers and even students basically want, even need, status quo pedagogy to continue as this codifies and justifies and valorises their existence and existing power and reward distributions. This could be an example of the condition underlying the rationale for this article and a case of Gramsci’s (1971) oppressed being complicit in their/our oppression.

Nevertheless in any event this proves for us to be a deep conundrum even a sloth of despond that will continue to entrap many would be pedagogical pilgrims.

## **Conclusions**

Today we see very little genuine scientific objection to the notion of a global problematique of emergency. And ‘solutions’ abound, yet as discussed in this article few are actioned in an empirical sense and yet fewer consciously draw from macro history. Yet all these secular solutions we face, however continue to ignore pedagogy – how come? How can this be? Realisation of this lacuna is one of the key background issues that led me to compile this article.

Furthermore these so called ‘solutions’ are often single bullet or new ideas, often from middle aged alpha males, with little linkage to other related ideas or to ancient thoughts, actions or learning’s. Indeed every day brings yet more excellent websites on carbon sequestration, simultaneous parallel national policy development, transition towns, downshifting, post peak oil and much much more. Yet.....

Such urgency and associated dissonance with respect to modernity are understandable as the mirror fractures into shards and we focus on only one or two shards and seek to address its reflection. Here we run the risk of throwing yet more of our modernity cargo overboard to try to lighten the load yet continue our lifestyle and population growth. And indeed much in modernity and post modernity even post post modernity is worthy of throwing overboard, however this article maintains that, in casting so much overboard we are at risk of throwing the proverbial baby out with the bathwater.

Rather, this article suggests, we need to revisit critical macrohistorical attributes of the global problematique, identify its 7 or so mission critical features, for instance including pedagogy, and like the deep sea diver reveal, retrieve the gold and bring these ancient wisdoms to the surface, rejoin it i.e. synthesise it with other shards and realign it to the contemporary human condition in order to engage its potential to reflect, heal, reveal and deal with our current position. Some other mission critical features could include, I submit: Oikonomia (prudential household economy management), Muruwah (deep and courageous love based service), Praxis (reflexive action to build ground up theory), Governance (inclusivity and participation in decision-making), Spieltrieb (the Romantics play based drive) and Prohairesis (Futuring – acting ahead wisely). Thus may I re-submit that one such macrohistorical shard long ignored

is pedagogy and in particular the ancient wisdom of the artificer of dexterity of *Homo Chiro*, embodying Futuring for instance as illustrated in this article through Causal Layered Synthesis.

In this article I have sought to respond to the critique that often Futures Studies does not engage in developing actual exemplars of projects that synthesise futures methodologies in ways that can demonstrate a practical answer to the question of ‘how then should we live together today to demonstrate proactively that a better world is possible tomorrow for our children?’. If there is a more pressing holistic question the please let me know? Such exemplars must needs, this article insists, include pedagogy and deep futures tools such as Futuring and of course CLS.

Finally, as outlined in the introduction, two CLA areas for future futures research, that emerge from this paper are the need for: (1) the need for further applications and documentation of CLA and CLS in other areas of praxis/futuring and (2) interface protocols with other emergent synthesis type methodologies.

To this end this article has sought to illustrate one such process that seeks to address this re-integration/synthesis challenge. It has sought to do this by focusing on pedagogy as the application of post-structuralism as the meta-method. This application has been undertaken in order to outline one method CLS that uses Futuring and Synthesis to reconstitute the analysis outcomes from the initial application of Causal Layered Analysis. I call this generic method Causal Layered Synthesis and commend it to those activists among us who seek to ‘act ahead wisely’ for a (better) world tomorrow.

## References

- Alexander, R. (2001). *Culture and Pedagogy: International Comparisons in Primary Education*. Malden, Blackwell Publishing. 640pgs.
- Dick, B. and P. Wildman (2005). *Critical Futures Praxis: futures, action research and change*. Prosperity Press, Brisbane: 28pgs.
- Dick, B. and T. Dalmau (1994). *To Tame a Unicorn: Recipes for Cultural Intervention*. Brisbane, Interchange. 133pgs.
- Galtung, J. and S. Inayatullah, Eds. (1997). *Macrohistory and Macrohistorians: Perspectives on Individual, Social and Civilizational Change*. Westport, Praeger. 260pgs.
- Glenn, J. (1989). *Future Mind: Artificial Intelligence - Merging the Mystical and the Technological in the 21st Century*. Washington DC, Acropolis Books. 370pgs.
- Gramsci, A. (1971). *Selections from Prison notebooks* (the prison diaries). New York, International Publishers.
- Inayatullah, S. (1990). Deconstructing and Reconstructing the Future: Predictive, Cultural and Critical Epistemologies. *Futures* **22** 2: pgs115-141.
- Inayatullah, S. (1998). Causal Layered Analysis: Post-structuralism as Method. *Futures* **30** 8. Pgs 815-829.
- Inayatullah, S. (ed). (2004). *The Causal Layered Analysis (CLA) Reader - Theory and Case Studies of an Integrative and Transformative Methodology*. Taipei, Tamkang University. 570pgs.
- Inayatullah, S., M. Bussey, and I. Milojevic. (eds). (2006). *Neohumanist Educational futures: Liberating the Pedagogical Intellect*. Maleny, Tamkang University Press. 400pgs.
- Jantsch, E. (1975). *Design for Evolution: Self-Organisation in the Life of Human Systems*. New York, George Braziller. 320gs.
- Koestler, A. (1978). *Janus - a summing up*. New York: Vintage. 300pgs.
- Kolb, D. (1984). *Experiential Learning - Experience as the source of learning and development*. New Jersey, Prentice Hall. 255pgs.
- Laslo, A. (2001). The Epistemological Foundation of Evolutionary Systems Design. *Systems Research and Behavioural Science*. **18**. Pgs 307-321.
- McKibben, B. (2010). *Eaarth: Making a Life on a Tough New Planet*. New York, Times Books. 252pgs.

Meadows, D., D. Meadows. J, Randers. W, Behrens. (1972). *Limits to Growth*, Club of Rome. 280pgs.

Milojevic, I. (2006). Collective Violence Pedagogy and the Neohumanist Peace-Oriented Response. Chapter 8 in Inayatullah, S., M. Bussey, and I. Milojevic. (eds). (2006). *Neohumanist Educational futures: Liberating the Pedagogical Intellect*. Maleny, Tamkang University Press. 400pgs. pgs 146-167. See pg46.

Mochelle, R. (2001). *Towards a New Constitutionalism: Developing Global Civic Responsibility through Participation in World Constitutional Deliberation*, RMITU (Royal Melbourne Institute of Technology University). Brisbane. PhD Dissertation. Unpublished. 300pgs.

Molitor, G. (1980). *Environmental Forecasting: Public Policy Forecasting*. Conference Papers, American Assembly of Collegiate Schools of Business, St. Louis Missouri [here we have the origins of Emerging Issue Analysis], Collegiate Schools of Business USA.

Pacey, P. and P. Wildman (2004). *Governance and Community - a participatory constitution*. Brisbane, Prosperity Press. 67pgs. Unpublished – available from the author.

Peitgen, H., and Richter, P. (1986) *The Beauty of Fractals: Images of Complex Dynamical Systems*. Berlin: Springer-Verlag. 200pgs.

Sherwood, John J. (1977), *Leadership: the responsible exercise of power*. Cincinnati, Ohio: Management Design Inc.

Wheatley, M. (1999). *Leadership and the New Science: Discovering Order in a Chaotic World*. San Francisco, Berrett-Koehler. 200 pgs.

Wilber, K. (1995). *Sex, Ecology, Spirituality: The Spirit of Evolution*. Boston, Shambhala. 830pgs.

Wildman, P. (1995). Research by Looking Backwards: Reflexive Praxis as an Action Research Model. *Action Research Case Studies Newsletter (ARCS) (published jointly by - ALARPM, Prosperity Press and Interchange)*. **3** 1, 20-47.

Wildman, P. (1997). *Policies in Organisations*. In three Modules viz. M1 Policies (55pgs+readings), M2 Organisations 70pgs +readings) and M3 Policies in Organisations (55pgs+readings), with each containing explicatory text and an associated book of readings, Lismore, Australia, Southern Cross University Press. See Module 1 Policies Figure 1 pg 19 and section commencing pg 37.

Wildman, P. (2002a) Activist Versus Academic writing: towards a richer conversation. *Futures*, **34**, 219-227.

Wildman, P. (2002b). *Learning from the Litany of Death: Using Deep Futures to move from Aboriginal Deaths in Custody to Participative Governance*. *Futures Bulletin* **27** 3: 1, 3-7, 24.

Wildman, P. (2002c). The Litany of Death: a deep futures critique of the Australian Royal Commission into Aboriginal Deaths in Custody. *Futures* **34**: pgs571-581.



Wildman, P. (2002d). Healthy Community Economic Futures. *Journal of Futures Studies*. 7 1. pgs135-144.

Wildman, P. (2004). Uncovering Paradigmatic Racism - A Deep Futures Critique of the Australian Royal Commission into Aboriginal Deaths. In S. Inayatullah. ed. (2004). *The Causal Layered Analysis (CLA) Reader - Theory and Case Studies of an Integrative and Transformative Methodology*. Taipei, Tamkang University. 570pgs . pgs.283-200.

Wildman, P. (2005a). *CLA critique and enhancements – critiquing post structuralism*. Brisbane, Kalgrove Institute: Research Report. 8pgs.

Wildman, P. (2005b). Bush Mechanics: futuring the Australian way. *Future News*, September. pg7. Unpublished – available from the author.

Wildman, P. (2008). *[BMARP1] Zen and the Art•ifice of Ingenuity: An action research report (2001-2008) into the practice and prospectivity of the bioneering Artificer/Bush Mechanic (Australian term) in the process of Exemplar System Development (ESD) for a better world: Vol 1- the Artificer*. KALGROVE/Prosperity Press – eBook 1- Bush Mechanic Action Research Project (BMARP): Report No. 1: Brisbane. 370pgs. Codifying the results of a seven year research program. The project commenced late 2001 and Learning Insights coding started in early 2003. V71 by 02-2008. For further information and research on the Artificer/Bush Mechanic please [www.kal.net.au](http://www.kal.net.au) note Adult Learning bar on top right of page under the ‘Adult Learning’ section of the menu bar. [BMARP – Bush Mechanic Action Research Project 2000-2010]

Wildman, P. (2010). *Zen and the Art•ifice of Ingenuity V-II: Comparative Educational Pedagogy’s – towards an emergent Chiro-pedagogy*. Brisbane Kalgrove Pty Ltd: eBook2. 250pgs. Unpublished - available from the author.

Wildman, P. and Cunado-Wildman, A. (2010). *Quo Vadis Early Childhood Pedagogy? Pedagogy then and now: a reprise of the directions and debacles in of early childhood (0-6yrs) pedagogy in Australia over the past 40 years with an eye to the next 10 – a firsthand (Annette Cunado-Wildman) and an observer’s (Paul Wildman) views*. Brisbane, The Kalgrove Institute. PowerPoint Presentation to Brisbane Hot Futures Group at 38 Royal St Virginia (4014) Brisbane Qld Australia on the 26th April 2010. 26 slides over 2hrs.

Wildman, P. and L. Cundy (2002). The Esoteric Thesis: Making inner sense of the ineffability of knowledge obtained during the exoteric research process. *ALAR Journal* (Action Learning and Action Research) 7 2: pgs3-21.

Wildman, P. and S. Inayatullah. (1996). Ways of Knowing and the Pedagogies of the Future. *Futures*. 28 8. pgs723-740.

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<sup>1</sup> This paper has been developed from work undertaken in applying and critiquing CLA Wildman (2005a) and in preparing for a recent presentation to the Brisbane Hot Futures Group in pedagogy Wildman and Cunado-Wildman (2010) on the 26<sup>th</sup> May 2010. While the claims made in this article are, I would argue, generally applicable to Western pedagogy, excepting the literature, then to a large extent, the applications and experience

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that I use as illustrations are based on my Australian experience, studies and research inc. case studies (see footnote 4 in this regard).

<sup>2</sup> **CLS** can also be seen as **CLAction** that is Causal Layered Action (**CLAc**) following **CLAn** (Causal Layered Analysis). Here analysis takes us down the depth layers and synthesis takes us up to through these layers in reverse order, while we travel between the two with Futuring. As we get to the surface that is the day to day litany layer where actions occur however these actions can, and need to, emerge from deeper layers of analysis as I seek to discuss in this article esp. in Tables 4b and 4c. (see also footnote 11).

<sup>3</sup> By technology is meant the application of scientific knowledge in physical and social areas in order to improve humanity's lot esp. as it relates to the centrality or lack thereof of the human hand (*chiro*) or whether the human is replaced by machine; health modalities are outlined in Wildman (2002d); and governance in terms of our way of organising social interaction whereby we answer collectively and individually the question 'how then should we live together today to demonstrate practically to our children that a better world is possible?'

<sup>4</sup> **CLA** is a deep futures methodology developed by Sohail Inayatullah in the late 1990's. Inayatullah (1998). It uses post structuralism to identify the layers of causation underpinning a particular event. See also Dick and Dalmau (1994) and Sherwood (1977) (see next paragraph in this endnote). I have found its application profoundly useful in challenging my and others instrumental or technologised 'linear sequential causation' view of causation in modernity and critically to braid mythos (the fourth CLA layer) with logos (the first three CLA layers).

Other parallels for systems of depth analysis include both use rings of concentric causation in relation to cultural change particularly in organisations. For instance Dick's (1994:29) metaphor is peeling onion skins in order are : (1) artifact – actual project, school the curricula (CLA equivalent - litany); (2) perspective – as per above (CLA equivalent – systems); (3) ethos – that it 'good' to socialise and control youth and to train them to be good workers (not critical citizens) (CLA equivalent – worldview); (4) paradigm – the basic constituents/stories of a culture (CLA equivalent – myth).

<sup>5</sup> Each of these issues has its own websites and there are many many more far beyond the capacity of this short piece to 'piece' together – hopefully together they make a positive overall impact. One issue mentioned though is '350' see <http://www.350.org/> this is an organisation seeking to reduce CO<sub>2</sub> pollution to 350ppm (parts per million) this century.

<sup>6</sup> To this end the pedagogical business established in by my wife and I in 2001, seeks in a humble manner to address this pedagogical challenge – here we seek to walk our talk. This business called Kids and Adults Learning or Kids for short may be represented by **Kids and Adults Learning** by having fun through play based learning in a **Grove** of gum trees where we seek to harmonise diversity in ourselves, our children, the parents and our communities and ethnicities, rather than centralising conformity. This then is a humble attempt at an Australian version of the Greek arena even, in an outdoor play area/classroom, thus the backronym (a retrospective acronym) of KALGROVE Pty Ltd. It stands firmly committed to a *vertically articulated developmental chiro-pedagogy* for use in Kids and Adults Learning, also known as Artificer Learning or Bush Mechanics Learning in Androgogical terms.

To this end we have developed and apply a system that extends play through Intelligent Narrative Play into our program called *Kids in Active Learning (KAL)* which incorporates key aspects of the play based NZ early childhood curriculum, in the 20 or so Early Childhood Development centres we manage in South East Queensland. These and other aspects of the Kalgrove mission are explicated on our website [www.kal.net.au](http://www.kal.net.au). NB1: adult education is listed on the top right hand side of the top Menu bar. NB2: While the claims made in this article are, I would argue, generally applicable to Western pedagogy, excepting the literature, then to a large extent, the applications and experience that I use as illustrations are based on my Australian experience, research and case studies.

Globally there are only a few secular pedagogical efforts that seek to address this challenge. Some of these include: (assessed 06-2010),

<http://www.lefca.org/> Canada;

[http://en.wikipedia.org/wiki/Folk\\_high\\_school](http://en.wikipedia.org/wiki/Folk_high_school) Danish Folks Colleges

[http://www.freireproject.org/Freire\\_Critical\\_Pedagogy\\_Project\\_Description](http://www.freireproject.org/Freire_Critical_Pedagogy_Project_Description) Barefoot Freireian schools

[http://www.swaraj.org/shikshantar/ls\\_discussion.html](http://www.swaraj.org/shikshantar/ls_discussion.html) Shikshantar Learning Societies India.

Generally all of these are basically modifications, even the humanising, of Status Quo Pedagogy and represent rearranging the emphasis on the; exploration, discovery, in-formal-ised elements of the conventional pedagogical process. In other cases e.g. the Canadian one the overarching Learning Enrichment Foundation simply agglomerates various disparate pedagogical activities inc. adult learning, early childhood learning, and conventional learning under 'one administrative roof' so to speak. None of these recognise the importance dexterity or what I call in this article *chiro-pedagogy* of the artificer. Indeed modernity disparagingly sees such a focus as mere 'instrumentalism'. The Indian and Freireian examples come closest to Kalgrove's vision of chiro-pedagogy. More on these and other pedagogical examples may be found in my second eBook [Wildman (2010)] on our website or by contacting the author.

<sup>7</sup> 'Futuring' is a term I coined, and methodologically developed, in the mid 1990's that is strongly action oriented and views the future as a 'complex adaptive system'. And that though experience and wise decisions today can 'act ahead wisely for our children's future' Wildman (1997), (2005), (2008), (2010). As per Table 4a I submit that Futuring has the following characteristics: The *Futuring* process is a form of anticipatory action learning that seeks to braid **prohairesis** (deciding ahead wisely) with **phronesis** (wise action today) to give us 'acting ahead wisely'. If I may suggest that this is a form of experiential learning and represents a forth approach to epistem after: empirics, hermeneutics and critics.

Futuring in this sense is about the process of *learning by acting ahead wisely* and seeks to answer the following question: *How then should we live, lean and love together today (acting ahead wisely) in order to demonstrate practically to our children that a better world is possible tomorrow?* Clearly embedded in this question are these four crucial dimensions of: **experience** (demonstrate practically), **intention** (a better world is possible), **process** (How then), **learning** (life based learning). **NB:** the word 'children' here is broadly interpreted to mean Gaia and all her children/life-forms.

The 'futuring turn' can be seen in my inversion of the following statement:

Says Max Weber: *The consequences of our actions are seldom exhausted by the achievement of our goals.*

Says the Futuring Turn: *The achievement of our actions should never exhaust our exploring the consequences of our goals.* (PW). The Futuring Turn is evident in both the above statements and especially in their braiding.

Futuring is also, in part, an analogue of Kolb's (1984) work, while Glenn (1989) also uses the term yet in a more conventional non actional sense. The term is also an extension of my epistemological work with Inayatullah. Wildman and Inayatullah (1996). Here we also see the Artificers logic base of: project (experience – demonstrate practically), global problematique (intention – a better world is possible), mutual aid/social holon (process – how then are we to conduct ourselves), and action learning (life based learning through reflexive praxis and artificer learning).

<sup>8</sup> It is a moot point how this layering extends that is some would argue that the Social is nested in the Economic, whereas others (including myself) argue the Social is nested in the Ecological which, in turn, is nested in the 'Physicallogical' (science of the physical or physiospheric world) and at this point, for me the secular ends. Many of my deeply respected colleagues, and indeed in the 'indigine' approach, however the 'physicallogical' is nested in the theological and then the 'spirituallogical' and ultimately in the cosmological.

<sup>9</sup> In relation to duress/Compulsion little or no justification is provided to individuals, families, localities or communities for the compulsory and continued attendance of school students in 'detention centre' schools. This is particularly irksome when our 'unfreedom' is obvious in that there even no participation by these groups in the establishment of curriculum priorities. And now in Australia even moreso as there is now no local context for curriculum articulation, development, innovation as all curricula from pre-school to high-school will be to be fixed centrally with no participation from 2011).

Furthermore this duress/compulsion dilemma is now even more heinous with the Commonwealth compulsorily undertaking the long term revocation of land rights in some 73 Northern Territory Indigenous communities, including the suspension of racial discrimination act of Australia in return for the provision of housing and other infrastructure provided parents send their children to school on a regular basis (a 75% minimum attendance record is required). Should this not happen up, to 50% of the parents welfare payments are garnisheed in an 'income maintenance' program. The original supposed 'trigger' for this 'intervention' that of extensive domestic violence (proven) and pervasive paedophilia in Aboriginal Settlements (unproved) which remains unproven even some five years after the original intervention under the previous government (@07-2010).

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<sup>10</sup> For instance in Australia from 2011 a National Curriculum will be introduced through ACARA covering all grades from Preschool to High School. This curriculum is based on conventional higher education epistemological disciplinary categories of English, Maths, History and Science. Furthermore, again like in the UK and its OFSTED (Office of Standards in Education) (also see Endnote 19) an overall pedagogical regulatory authority is to oversight this process. This authority will commence formal operations in 2011 in Australia viz. ACARA the Australian Curriculum, Assessment and Reporting Authority <http://www.acara.edu.au/default.asp>. Tragically the adapted NZ play curriculum for early childhood development is to be replaced in the prep year – 4 yrs old (not in the kindergarten year - 3yrs old) by this conventional pedagogy. Depressingly this turn has gone largely un-critiqued in the media or academy.

<sup>11</sup> In addition to this CLA I have undertaken several CLA's on various issues inc. Australian Indigenous Issues viz. Australian Deaths In Custody Wildman (2002a), (2002b), (2002c), (2004).

<sup>12</sup> Here we see, especially in Anglo Saxon/Anglophone schooling (UK, Canadian, Australian, US), the fall and fall of oracy and the rise and rise of what I call 'textacy'. In French and especially in Russian schools Oracy is 'The primary form of assessment- in our schools it is all but ignored. There are a range of reasons for this, mainly to do with the 'atavistic' pedagogical belief written work is the only 'real' work and that oracy does not make the literate man because 'even the sauvages speak'!! This totalisation that noospheric considerations have gained in the Western, and in particular in this instance Anglo Saxon, pedagogy. See also Alexander (2001:368-374, 566-567) viz:

*We need to remind ourselves of the legacies of nineteenth-century English elementary education one of which was the received view, even up to 2000 and no doubt beyond, of what 'basic' to the primary curriculum, the 3R's were directed not at the social and cultural plurality that is typical of today's primary schools but at the working classes alone and they were devised not to liberate those working classes, but to contain them. The great fear expressed by opponents to universal public education at the time was that it would give the masses ideas above their 'station', and empower them to question and challenge what they were expected simply to accept. Control was more effectively exercise by commanding the silent completion of mechanical reading and writing tasks than by uncorking the volatile possibilities of talk i.e. oracy. There remains an atavistic belief in Anglophone pedagogy that the written work is the only 'real' work.*

<sup>13</sup> Here CLM = CLA+Futuring+CLS+Futuring=CLM  $\equiv$  1<sup>st</sup> Moment  $\rightarrow$  2<sup>nd</sup> M  $\rightarrow$  3<sup>rd</sup> M  $\rightarrow$  4<sup>th</sup> M  $\rightarrow$  CLM and we enter the second cycle of CLM. CLM may also be seen as CLP (Causal Layered Praxis) or Depth Action. (see also footnote 2).

<sup>14</sup> Similar terms to Futuring: these fit in several categories (1) Analogy (similar function different origin e.g. wings of a fly cp. those of a bird), (2) Homologue (different function similar origin e.g. bird wing and fishes' fin) and (3) Parallel (similar origin similar function e.g. chimp brain and human brain). Thus applying these terms we have: Critical Futures Praxis (analogy), Applied Futures and Anticipatory Action Learning (homologue), and Artificer Learning which is a combination of Prohairesis (deciding ahead wisely) and Phronesis (ethical practical action) called here Prohairesis or *proactive wise practical intention* (parallel). There is no direct English equivalent of these terms, let alone their integration, prudential proactive action would come closest. Generally English, and indeed most language systems, have much more linguistic, governance inc, jurisprudential scaffolding for describing the past and reactivity in general than the future and proactivity.

<sup>15</sup> See <http://www.archive.org/details/ThePowerOfNightmares>, this series of three documentaries by Adam Curtis is appro pos in this regard as it portrays, if I may, a most negative approach to futuring that has left us with now ubiquitous 'the war on terrorism' as a legacy for our grandchildren. It remains a great regret to me that third sector NGO's seem unable to grasp, let alone, reverse this negative turn in a most powerful social technology.

<sup>16</sup> For example see: **Bureaucracy frustrates U.S. Gulf oil spill efforts** <http://af.reuters.com/article/energyOilNews/idAFN1918971720100619?pageNumber=3&virtualBrandChannel=0> Sat Jun 19, 2010. 8:16pm GMT; Thomson Reuters.

For example: article pg2: 'Last week, the U.S. Coast Guard shut down 16 vacuum barges that were sucking up crude from Louisiana marshes. The units, which consist of trucks and tanks on barges that suck up thousands of gallons of crude, needed to be checked for stability and if they had life jackets and fire extinguishers. Louisiana Governor Bobby Jindal had asked officials to inspect them quickly without bringing them back to dock. But the units had to travel back to the dock where they sat idle for 24 hours before being allowed to travel back to oil-fouled Barataria Bay, Bay Jimmy and Pass A Loutre. After 24 hours, the barges went back to work, and

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according to media reports, no inspections were performed. On Friday, the Coast Guard shut down two more barges, prompting Plaquemines Parish President Billy Nungesser to make an angry call to the White House, which ordered them back into operation, his office said. (PW)

Meanwhile, the oil keeps gushing into the Gulf at a rate now estimated as high as 60,000 barrels a day'. Here competing bureaucracies are citizen local, federal, Coast Guard all with conflicting regulatory regimes as well as BP itself and community and environmental NGO's.

<sup>17</sup> These robust belief systems are often global transnational and include groups such as doctors without frontiers, Greenpeace (othered selves) and even al-Qa'ida (rejected selves).

<sup>18</sup> *Minority Report* is a 2002 science fiction film directed by Steven Spielberg and loosely based on the short story 'The Minority Report' by Philip K. Dick. It is set primarily in Washington, D.C. and Northern Virginia in the year 2054, where 'Precrime', a specialized police department, apprehends criminals based on foreknowledge provided by three psychics called 'precogs'. The cast includes Tom Cruise as Precrime officer John Anderton, Colin Farrell as Department of Justice agent Danny Witwer, Samantha Morton as the senior precog Agatha, and Max von Sydow as Anderton's superior Lamar Burgess. The film has a distinctive look, featuring high contrast for dark colours and shadows, resembling film noir (a 1970's cinematic term used primarily to describe stylish Hollywood crime dramas, particularly those that emphasize cynical attitudes and sexual motivations with its origins in German expressionism). See [http://en.wikipedia.org/wiki/Minority\\_Report\\_%28film%29](http://en.wikipedia.org/wiki/Minority_Report_%28film%29)

<sup>19</sup> <http://www.acara.edu.au/default.asp> ACARA (Australian Curriculum Assessment and Reporting Authority) largely modelled on the largely discredited UK's New Labour predecessor OFSTED (Office of Standards in Education) from the mid 1990's. Within this site see <http://www.myschool.edu.au/> where performances of NAPLAN tests undertaken by all Australian students can be compared and of course the next step is to establish intra-school then inter-school then inter-state then inter-national league tables. Subsequently I anticipate that in the next five years the ACARA turn will encompass universities their staff and all qualifications, RTO's (Registered Training Organisations) and TAFE. Incredibly and indeed horribly for me, in the UK OFSTED and its inspectors whose reports can't be questioned or debated, and even more alarmingly, yet not surprisingly, the OFSTED gaze is totalising and includes androgyny i.e. Adult Learning.

In Australia NAPLAN - National Assessment Program in Literacy and Numeracy, was developed to undertake diagnostics on individual students learning and to aid remediation thereto and NOT, as it being used today, to generate league tables. This change came in with a bang in the UK but hardly a whimper in Australia.

Undoubtedly Australian academics and pedagogues should, and could, have done better. At least the teachers were seen to put up fight even if ultimate their compliance was never in doubt. One rationale that has some attraction is that academics and academics see a lot to gain, personally and professionally in the entrenchment of SQP via ACARA. As an outlier observer and reformed academic I have been able to watch, observe, comment, react and proact (KALGROVE) to this trend. Thus this article is possible largely only outside academia yet not, I hope, outside the academic turn as a whole.

Here we have a great example of what I call 'bureaugogy' which describes the process whereby the state takes over learning. In response to this crisis I advocate the constitutional recognition of the need for separation of powers in our bicameral Westminster system to include pedagogy along with justice, church and government (and I would suggest the media). Indeed this protection should be extended to our 'social ecology' just as legislation these days 'protects' our 'biological ecology'.

<sup>20</sup> See Brisbane Courier Mail 11-06-2010 pgs 1-2 article by Tanya Chilcott (School's Reporter) 'Stress Test – children cent home in tears, principals threatened, and some students ignored, teacher's admit to 'cheating'' (in the Australian annual national NAPLAN test). Students with greater learning needs were ignored as teachers under direction 'teach to the test'. In other reports in several schools these students were asked to stay home. An emergent response from pedagogical authorities is to establish, what I see as, a sort of 'drug testing' regime to 'attempt to expose and quarantine these types of occurrences and to improve transparency.

See also <http://www.nytimes.com/2010/06/11/education/11cheat.html?src=me&ref=general> (10-06-2010). *Under Pressure Teachers Tamper with Tests* by Trip Gabriel. 'Colorado in the US passed a sweeping law last month making teachers' tenure dependent on test results, and nearly a dozen other states have introduced plans to evaluate teachers partly on scores. Many school districts already link teachers' bonuses to student improvement on state assessments. Houston decided this year to use the data to identify experienced teachers for dismissal, and New York City will use it to make tenure decisions on novice teachers'.



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<sup>21</sup> Here 'us' refers to Annette Cunado-Wildman and myself, Paul Wildman it does not refer to the Royal 'We'.

<sup>22</sup> Brisbane Hot Futures Group meeting on Early Childhood Pedagogy on the 26-04-2010 Brisbane, Australia. Further I submit we need to work towards a Post Apocalypse Pedagogy this is explored in my eBook 2 Appendix G. In such an approach pedagogy, unlike at present, is to be seen a-new a-fresh and an utterly foundational and crucial components of say 'new age' movements such as Transition Towns, Permaculture, Post Peak Oil'ism, Powerdown's, Downshifting, post Abu Gharib etc. My responses in order of priority were: (1) Pedagogy, (2) Governance, (3) Glocal Problematique, (4) Per capita resource use and (5) Security: Energy & Food & Personal. What are yours? Let me know.....