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AUS4: Artificer - Interface to Interfice~ 2009

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Introduction

This section seeks to expand and extend that in my overview eBook on interface. Interface is ‘T’he demarcation issue for the Artificer cp. for instance the Artisan. Interfice is a neologism that demonstrates the link between Artifice and Interface and Interaction.

Bushy Cultural Interface - types of Bushy and other words for Bushy

See Bushy QQ’s (+ref) latest V5 09-2008

Technacy moving beyond instrumental competency to include the person, tool and environment interfaces

Technacy links or interfaces the trialectic of: person the tool and the environment not just the instrumentalised competence within the context of reconstructing pedagogy.

Technacy includes:

1. task purpose and context factors: normally difficult to control in the first instance and includes temporal (time based) and contingency factors;
2. agent(s) of the task: usually seen as human contribution of knowledge, technique, organisation, skill, process, values, etc. The agent is normally, but not exclusively, the human contribution (sometimes labelled 'Human Factors' or simply "People");
3. at least one physical or abstract 'tool' being used: either devices/instruments or 'manipulators' such as algorithms or systems;
4. at least one resource material or data being manipulated by the above tool: includes such things as materials drawn from the eco-environment, data, or objects shaped by the 'tools'.

See Seemann (2000).

The Wild West in the Evolution of Technology Education – the marginalisation of Technacy

[In Western industrialised societies many scholars and teachers have devoted much of their time to analysing and debating the purpose of schooling. This of course was not always the case. The provision of education was traditionally the responsibility of parents and families and later the village (KIDS AND ADULTS LEARNING) and still later, for some, the church. The context of human settlements generally dictated the things one had to know and to become skilled in, in order to simply live. What was taught by parents and their parents before them was sufficient. There was no pressing need to challenge conventional practices and thought. The economy, the social structures and the technologies of human settlements changed little.

During the nineteenth century, with the advent of the industrial revolution, western societies began to change their human, educational, technical and environmental dynamics, although some scholars have argued that the changes began much earlier when Benedictine monks introduced systematic work routines to mass produce the Scriptures (Mumford, 1934). The rhythm of production, it was said, was already in place and set human activity towards a greater degree of mechanisation. The invention of the clock only helped to speed this process up. Time became a measurable commodity, divorced from the natural cyclical seasons and the sometimes chaotic patterns of nature. A growing proportion of people found themselves looking towards a clock to regulate their activities and their production, rather than towards the patterns provided by nature.

The model of a linear sequential time interval soon became the backbone of Western education. To prepare citizens for industrial life, they had to become productive as a measure against labour time. People were led to believe that to have self worth they had to regulate their working day to achieve maximum productivity. People thus became organised as cogs and functionaries for industries. The industrial, regimented work ethic became a measure of self worth and soon found its way into education. Schooling began to emulate the factory, industrialised, centrally control, behaviour predetermined, no input from the workers except compliance. The school day was regulated by the bell the measure of labour time or labour as time to be spent cost-effectively on

tasks as directed. It could be said that these underlying patterns still prevail today in most schools, the only changes being in lesson styles and educational technologies. In many countries vocationalism has re emerged, placing renewed expectations on schooling and technical education to produce economically productive functionaries as part of a supposedly internationally competitive internationalised world – where is the KAL learning here – answer it ain't.

The school systems of the industrial era presented the world as generally ordered into independent subjects. This pattern so characteristic of western education sounded warning bells for some educationists. Dewey, for example, rejected the divisions of the curriculum, arguing that disintegrated school curriculums produced disintegrated minds and disintegrated people. The divided presentation of knowledge deskilled the mind and reduced its capacity to make integrated judgements, in line with the learner being at best a cog in industrialisations wheel where simple repetitive actions in relation to a specific competency for part of a job say putting a nut on a bolt or something similar were aggregated mechanically in the production line to a finished product/car. These repetitive actions found their homologue in the time regulated curriculum and its minute prescription of analytical outputs required – little or no critical, synthetic or practical knowledge was required nor were skills in this regard rewarded viz. males and practical play/projects were and are systemically devalorised. The powers and structures of industrial economies were inappropriate and indeed inadequate to foster the development of integrated schema of social, cognitive and material experience. It could be said that people were expected to become efficient only in the short sighted particulars. **What was not fostered was the long sighted integration of knowledge that is needed for the implementation of sustainable development strategies.**

Western education thus has become a commodity of modularised, disintegrated learning. With the aid of science and technology, it has become more important to collect data and file it in databases than to make practical, integrated sense of it all. The current explosion of the information age into global networking will no doubt produce fundamental effects, leaving others wanting. One effect may be an increase in the demand for "anywhere/anytime" database and communication software and pocket-sized hardware. We can expect an increase in the tendency to extract convenient data from the huge pile of changing information in order to advance private or secular gains: a kind of self-satisfying pseudo-science. An area left wanting may continue to be the development of expertise capable of understanding the whole, extracting the essentials, and implementing new processes that are relevant, humane and sustainable in their outcomes, and crucially actually action wise doing stuff actually doing prioritised collaborative convergent action or indeed any action – wood work, metal work, cooking work, cloths work etc all are no longer taught in schools let alone their context (technacy) as in the artificer. [NB: **Technacy** is the ability to understand, skilfully apply and communicate creative and 'balanced' technological solutions that are based on understanding the contextual factors involved].

With industrialisation, education became instrumental and in turn became instrumental education, in creating new social hierarchies and in turn creating a disaggregated competency behaviour based compartmentalised type of learning. Managers of industry and policy makers achieved higher status while workers on the factory floor and tradespersons assumed subservient roles, even if highly skilled. In the school too, when manual training in woodwork and metalwork was offered, it was quickly relegated to a lowly position and so became the preserve of the slower learners. The academically oriented subjects became more highly valued. Literacy and numeracy, devoid of technacy, thus became the cornerstones of western education, while technacy was marginalised. In effect, the human hand was perceived and represented in the curriculum as divorced from mind and therefore less prestigious.

The separation in the curriculum of mind from matter was the antithesis of village education in pre-industrial Europe. For many villages, the most highly prized individual was the chief artisan such as the blacksmith, the carpenter, or the stone mason. Not only were they skilled in their craft but they also relied on them for practical community guidance in the social sense. The prowess of the artisan was deeply embedded in a social context that directly related to the natural environment from which his/her raw materials were derived. The artisan's prowess was necessarily defined by the interdependent relationships found in the social, technical and

environmental context of the craft.
Paul Wildman Brisbane 11-2008 Drawn from Seemann (2000)

World view and Zeitgeist interface with a lost wisdom

'Zeitgeist' refers to the ethos of a select group of people, that express a particular world view which is prevalent at a particular period of socio-cultural progression. Zeitgeist, then is the experience of a dominant cultural climate. The world view of today is in my view Platonic esp. in its praxeology.

A world view (or worldview) is a term calqued from the German word Weltanschauung Welt is the German word for 'world', and Anschauung is the German word for 'view' or 'outlook.' It is a concept fundamental to German philosophy and epistemology and refers to a wide world perception. Additionally, it refers to the framework of ideas and beliefs through which an individual interprets the world and interacts with it. The German word is also in wide use in English, as well as the translated form world outlook. (Compare with ideology).

A worldview describes a consistent (to a varying degree) and integral sense of existence and provides a framework for generating, sustaining, and applying knowledge.

Weltanschauung – meaning and linguistic interpretation

'Weltanschauung' this expression refers to the 'wide worldview' or 'wide world perception' of a people, family, or person. The Weltanschauung of a people originates from the unique world experience of a people, which they experience over several millennia. The language of a people reflects the Weltanschauung of that people in the form of its syntactic structures and untranslatable connotations and its denotations.

If it were possible to draw a map of the world on the basis of Weltanschauung, it would probably be seen to cross political borders — Weltanschauung is the product of political borders and common experiences of a people from a geographical region, environmental-climatic conditions, the economic resources available, socio-cultural systems, and the linguistic family. (The work of the population geneticist Luigi Luca Cavalli-Sforza aims to show the gene-linguistic co-evolution of people). If the Sapir-Whorf hypothesis is correct, the worldview map of the world would be similar to the linguistic map of the world. However, it would also almost coincide with a map of the world drawn on the basis of music across people.

Epic poems become a shared Weltanschauung often by people across political borders and across generations. Examples of such epics include the Nibelungenlied of the Germanic-Scandinavian people, The Silappadhikaram of the South Indian people, The Gilgamesh of the Mesopotamian-Sumerian civilization and the people of the Fertile Crescent at large, The Arabian nights of the Arab world and the Sundiata epic of the Mandé people.

Construction of worldviews

The 'construction of integrating worldviews' begins from fragments of worldviews offered to us by the different scientific disciplines and the various systems of knowledge. It is contributed to by different perspectives that exist in the world's different cultures. This is the main topic of research at the Center Leo Apostel for Interdisciplinary Studies.

It should be noted that while Apostel and his followers clearly hold that individuals can construct worldviews, other writers regard worldviews as operating at a community level,

and/or in an unconscious way. For instance, if one's worldview is fixed by one's language, as according to a strong version of the Sapir-Whorf hypothesis, one would have to learn or invent a new language in order to construct a new worldview.

Worldview components

According to Apostel, a worldview should comprise seven elements:
1. A **cosmology,** a constructed world-view should contain an account of its own 'building blocks,' its origins and construction.
2. An **ontology,** a descriptive model of the world and how we fit therein
3. An **epistemology**, or theory of knowledge, which in effect builds an aetiology. 'What is true and false?'
4. A **praxeology** which links to aetiology, or methodology, or theory of action, and thus an aetiology (a theory of causation). 'How should we attain our goals?'
5. An **ethical system** of values, answers to ethical questions: 'What should we do?'
6. A **macrohistory** explanation of the human world and thus how it comes to be
7. A **futurology**, answering the question 'where are we heading?'
8. A **metapedagogy** about learning how children and, adults learn and how they should be 'taught'

Table: European/Western/Anglo Saxon Weltanschauung/Worldview Macrohistorical Comparisons

W aspects	**(proto European) Palaeolithic - Neolithic**	**Interregnum**	**(European) Renaissance**	**(European →Global) Modernity**
	10000BC to Modernity ~ Pre Modern			
1. Cosmology	Mythological →tribal	Myth → Nation	Scientific → Universal	Scientific → Universal
2. Ontology	Participative	H/E separate	Observer	Maker
3. Epistemology	TD blended	TD now separate	TD discrete & braided	T|D = Thinking ‖ Doing
4. Praxeology	T∞D	Bureaucracy	T&D (Newtonian linear sequential causation)	T→D via. Bureaucracy (causation same as Renaissance)
5. Ethics	Tribal Matriarchal – no writing	Rights of the individual citizen	Church based Patriarchal – inquisitional inquiry	Scientific Patriarchal – scientific inquiry
6. Macrohistory	Cosmological	G's' will expressed on earth	Fall Cross Redemption	Scientific Method towards 'T'ruth
7. Futurology	∞ Dreamtime – the (centre) eternal return/the eternal now	God's' will	┼	→ Arrow of Progress (bigger &/is better)
8. Metapedagogy Viz. Pedagogy & Androgogy (P&A)	Kids & Adults Learning, learning mentoring + vertical integration of P & A	Only elite learn & usually by rote ends with the European Dark Ages – pesants subservient & don't need to learn	Children tended to be 'taught' & as small adults (A into P)	Pedagogy ≠ Androgogy Voc Ed ≠ Higher ed (P ≠ A)
9. Zeitgiest	We	Chosen ones	Thee	Me
10. Time period	3500BC back (40,000yrs)	500BC-500AD	1300-1700 (from end of the dark ages inc. Enlightenment circa. 1600's to beginning of modernity) (300-400yrs)	1750 forward (Industrial revolution) (200-250yrs)
	Multi-skilled synthetical		Polymath universal	Unitary skilled analytical
Sociological	Tribal, exchange systems	Greek Democracy Roman Bureaucracy	Inquisition, Feudalism, bureaucracy, Nation State	Human Rights

Source: P Wildman 10-2008 comm. 09-2008

The term 'Worldview' denotes a comprehensive set of opinions, seen as an organic unity, about the world as the medium and exercise of human existence. Weltanschauung serves as a framework for generating a cohering framework underpinning various dimensions of human perception and experience like knowledge, politics, economics, religion, culture, science, and

ethics. For example, a 'Western' worldview of causality as uni-directional, an Eastern or 'Buddhist' cyclic worldview, or 'Hindu' spiral worldview generates quite divergent frameworks of how the world works that reflects these systems of causality. A uni-directional view of causality is present in some monotheistic views of the world with a beginning and an end and a single great force with a single end (e.g., Christianity and Islam), while a cyclic worldview of causality is present in religious tradition which is cyclic and seasonal and wherein events and experiences recur in systematic patterns (e.g., Zoroastrianism, Mithraism, and Hinduism).

These worldviews of causality not only underlie religious traditions but also other aspects of thought like the purpose of history, political and economic theories, and systems like democracy, authoritarianism, anarchism, capitalism, socialism, and communism.

The worldview contains a view of causality of aetiology viz. linear and non-linear causality generates various related/conflicting disciplines and approaches in scientific thinking. The Weltanschauung of the temporal contiguity of act and event leads to underlying diversifications like determinism vs. free will. A worldview of Freewill leads to disciplines that are governed by simple laws that remain constant and are static and empirical in scientific method, while a worldview of determinism generates disciplines that are governed with generative systems and rationalistic in scientific method.

[Aerts, Diederick, Apostel, Leo, De Moor, Bart, Hellemans, Staf, Maex, Edel, Van Belle, Hubert, Van der Veken, Jan. 1994. "World views. From Fragmentation to Integration" VUBPress. Translation of (Apostel and Van der Veken 1991) with some additions. - The basic book of World Views, from the Center Leo Apostel. Drawn from http://www.reference.com/search?q=worldview]

Renaissance Project – interface central

A RPerson was, in order to be fully informed on him/her self and the outside world, 'expected' to undertake a RP that could demonstrate, in the context of his civic duty, his mental ability his material capability and his polymath capacity through both theoretical and practical integration. [as well as synergising several related fields (theoretically AND practically) e.g. Leonardo De Vinci (1452-1519) or (historically) Archimedes (287-212BC)].

To the Renaissance man duty is closely connected to duty expressed as a civic commitment to innovation, progress, and exploration, while duty in the medieval world is connected almost exclusively to Christendom and its prescriptions of how the world ought to be cp. is now.

Homo-sapiens – handkind – head~hand interface – we used our hands to get a-head

Homo-sapiens – handkind – we used our hands to get a-head. 2½myrs ago our brains were 4-500cc same as a chimps and from then to 1½my stone tools were extremely basic just a rock with a few chipped off faces – nothing more. Fire and clothes would also have been a major help in getting through the dark post-Toba centuries and millennia. None of the apes has learnt to control it or make them, but the genus *Homo* including its various species had used both long before *Homo sapiens* appeared. The oldest known deliberately constructed fireplace has been found in Kenya, at Chesowanja, and it has been dated to about 1.4 million years. By 300000y ago viz. the Palaeolithic man had developed to the present brain capacity and emerged in Africa. Stone tools were much more complex multi-faceted and numerous in

design and application. Then 200000y ago our larynx dropped from the higher ape type position to its present day lower position allowing a vast increase in specific vocalisations i.e. talking. This allowed for instance, rather than the six years a chimp takes to learn to crack a nut with a rock, explanation to be given by an adult to a child and the nut cracking to be accomplished in days, or even hours, rather than years. Mimesis with understanding embedded in Memesis inc. mentoring – cultural learning.

Around 70000 years ago a second mass extinction, particularly of Homo sapiens, occurred with the eruption of the Toba super volcano in northern Sumatra. This was the largest eruption in the last 25 million years, and was for many scientists a massive climate-changing event that scientists believe might have wiped out much of humanity. Genetic evidence suggests our species' numbers fell to extinction levels of maybe 1000 breeding pairs in central Africa. This seminal event also removed great diversity in the human DNA chain indeed Chimps have at least 4 times the genetic diversity humans have. Furthermore it can be argued that this even removed several of the competition i.e. other of the upright apes leaving all but a few say *Homo neanderthalensis* is (20,000 years ago) and *Homo florensis* (12,000 years ago), with the latter being more akin in brain capacity to our common ancestors 2 ½ million years ago, but they survived in an isolated pocket until 12,000yrs ago. Intriguingly *Homo neanderthalensis* already cold adapted were probably already living in Europe and were outside of the 'Toba kill zone'.

[While it is generally accepted today that *Homo sapiens* developed out of some kind of *Homo erectus,* it is far from clear when, where, why and from what group earliest direct ancestors evolved from. There is a rather vague consensus that *Homo sapiens* started to develop out of some *Homo erectus* group around 160,000 years ago, somewhere in Africa. Maybe it did. What is clear is that some *Homo erectus* groups coexisted with *Homo sapiens*, even post-Toba. *Homo erectus javaensis* ('Java Man') lived on Java as recently as 25-30,000 years ago (ref. Swisher III C.C. et al. 2000) and *Homo floresiensis* on the Indonesian island of Flores survived even longer until around 12-18,000 years ago (ref. Lahr M.M. et al., 2004; Brown P. et al., 2004; Morwood M.R., et al., 2004). http://www.andaman.org/BOOK/originals/Weber-Toba/ch5_bottleneck/textr5.htm .

Indeed it may well have been **their attitude towards technology using their ingenuity, with the hand-head co-ordination with fine motor skills, for innovation** that gave our ancestors the rapid flexibility and adaptability necessary for success even in most trying circumstances. Technology is the only discernible difference between the four survivors of the bottleneck. Our technology-savvy ancestors could adapt on a much shorter timescale than even he fastest biological evolutionary process could have provided. Neanderthal and and the two *Homo erectus* species to make it through the Toba bottleneck also had a certain amount of technology but it shows rather slow and ponderous development, if any, before they vanish into extinction. Whether *Homo sapiens* actively used his technological edge to push Neanderthal and others into extinction is unknown, but in view of the way *Homo sapiens* has treated members of his own species from antiquity to the present day, it is not totally unthinkable that he did.

Once started, *Homo sapiens* never stopped inventing new and improving existing technologies. In the very recent past, he has systematized his ever-growing and aggressive quest for new skills and knowledge in Science, making more knowledge and understanding possible along with ever more technological inventions, and in ever more rapid sequence. Only a few thousand years after the first cities appeared, while and others are heading out into interstellar space.]

Here we see the emergence of the fourth crucial attribute of homo (in my view) (1) as proto-humans *using our hands to get ahead* and (2) *Mimesis with understanding* embedded in

Memesis – the integration of thinking and doing through speaking and mentoring – *copying with our hands and then understanding with our head*, (3) *obsessive interest in* techne which when overlaid with Greek duality episteme become *technology* comes from even a 'hard wired' species memory of Toba to survive meant *being handy about things that mattered* – hand and tools that fit there into and (4) *homo mutualis* i.e. to survive Toba and to survive at all humanity had to lean to co-operate – mutual aid was born – or more correctly burnt into us – *giving each other a-hand to get a-head*. All this by 50,000 yrs ago – we still see echoes as shards of this today. Even in the Paleo world were probably not more than a few million people worldwide. Our second population expansion occurred around 10000 years ago with the advent of Neolithic agriculture.

In short speech allowed understanding with copying. Our cultural evolution went into overdrive. Talking validates ideas concepts e.g. thinking and shares that between individuals and collections thereof. Then another overdrive occurred some 3000yrs ago with the advent/invention of writing and later still 30 years ago with the advent of computers now thinking has become automated then 10 years ago with the cracking of the human geonome..... Here we see the utter importance of the head hand interface – an interface now no longer respected even in vocational training indeed somewhat foreign to our Greek dualistic epistemic heritage, yet an interface utterly foundational to our humanity.

So I see the Greek duality, which broke from the Paleo/Neo world of embedded consciousness and the braiding even merging of thinking and doing, which recognised this break and sought to hold it together in techne now is productive of 'technology emergent and resplendent' in Web 2 and many consciousness raising and conscious evolution type initiatives – which has no physiospheric dimension. For instance inc. Wilber – ultimately we become etherealised and thus consequently dematerialised – we become all head and no hand with our hands jobs being taken over by technology.

So we move from 'using our hands to get a-head together' to 'using our hands to get a-head'. **In reality as a species we need a-hand to get a-head.**

[Greek Duality ~ origins separation of the mind and body. (gnous from soma) The soul in (Platonic) Greek thought however is one part of a dualistic human being made up of 'soul'; and 'body'. This 'soul' is an immortal essence prior to its birth into inferior matter, and it returns at death the she superior spiritual realm. The immoral soul, spirit, psyche was the superior and 'true' part of a human being, while the body was its inferior vehicle. If we put these two Greek concepts together - Logos and psyche, Jesus becomes in, in Greek thought a Divine-human mix of soma matter and an immortal soul that in Jesus' case is the pre-existent divine logos 'made flesh' i.e., incarnated to 'live among us' less divine types. This immortal 'soul' of God will depart at death to the heavenly realms like all migrating souls.

[*Greek gods regularly had sex with human women to produce human-divine offspring to ensure the continuation of the human species diorama*. Webb, V. (2008). *Like Catching Water in a Net: Human Attempts to Describe the Divine.* New York, Continuum. 250pgs – pgs 198-199

Greek Duality ~ origins separation of the mind and body. (gnous from soma) 198 The soul in (Platonic) Greek thought however is one part of a dualistic human being made up of 'soul'; (sprit/mind/psyche) and 'body' (matter/flesh/soma). This 'soul' is an immortal essence prior to its birth into inferior matter (soma- the body), and it returns at death the she superior spiritual realm. *[later to become the Gnostic dualism of 'dark and light'*

201 - such dualisms use Aristotles theory of the excluded middle so they are either or not either and there is no included middle - building on Platonic dualities that separate soul and matter i.e. thinking and doing. This is also reflected in the 'yin and yang' of the I-Ching yet it is actually 'yin yang' not even 'yin and yang' let alone the Ancient Greek version of 'yin Or yang'] The immoral soul, spirit, psyche was the superior and 'true' part of a human being, while the body was its inferior vehicle. If we put these two Greek concepts together - Logos and psyche, Jesus becomes in, in Greek thought a Divine-human mix of soma matter and an immortal soul that in Jesus' case is the pre-existent divine logos 'made flesh' i.e., incarnated to 'live among us' less divine types. This immortal 'soul' of God will depart at death to the higher heavenly realms like all migrating souls. (*italics added PW*) *[Generally most demigods have sought to organise socially as either thinking (ethereal, dematerialised, energy, finance, noosphere) or doing (soma, praxeology, physiosphere) not 'and' i.e. God elite over Soma mass (slavery/proletariat) one of the few demigods who brought the people with him was Hitler - who of course had his horrific mass soma]*

[Yet Greek gods had to relate to Soma i.e. they regularly had sex with human women to produce human-divine offspring 199 – that is that in the Greek pantheon it was necessary that the etheros and soma interlinked and thus energised the continuation of diorama of the human race – etherosphere/etheros/ethereal]

Perhaps the purpose of the consciousness evolution is **not to leave the natural world for a 'higher plane'**, ***but*** to be learn to **better integrate with conscious nature in our present wholeness on earth in ways that both gives us the sense of completion and fulfilment** we seek, and in so doing sustains living diversity in a more integrated compassionate and caring and sustainable relationships. If so then one utterly crucial and almost completely overlooked collective aspect of this higher consciousness is interface and especially the interface between thinking and doing.....

The Demiurge then is the interface herm between the cosmos's ultimate principle and cosmos's ultimate practical.

Demiurge (from the Greek δημιουργός *dēmiourgós*, Latinized *demiurgus*, meaning 'artisan' or 'craftsman', lit. 'public or skilled worker' (from δῆμος demos (common people) + ἔργον ergon (work)) is a term for a creator deity, responsible for the creation of the physical universe.

In the sense of a divine creative principle in expressed as urge, ergon or energy, the word was first introduced by Plato in *Timaeus*, 41a (ca. 360 BC). It subsequently appears in a number of different religious and philosophical systems of Late Antiquity besides Platonic realism, most notably in Neoplatonism. In Neoplatonism Plotinus identified the demiurge as *nous* (divine mind), the first emanation of 'the One' (see monad). Neoplatonists personified the demiurge as Zeus.

The Demiurge then is the interface the herm between the cosmos's ultimate principle and cosmos's ultimate practical.

Mechanical emergence of 'specialisation silos' unable to interface and conceive the whole

First, there is the emergence of '**specialisation silos**' in all creative fields, brought about by the **mechanical transformation of society**. Although doubtlessly this is one of the greatest achievements of the present, it is however, followed by an ever increasing **inability to conceive of the whole.** As a result the role of the social organism in the evolution of mankind and its importance for human progress is not understood. 391 [PW] [12-07-2008]

Engel, H. (1964). *The Japanese House - a tradition for contemporary architecture*. Tokyo, Charles E Tuttle. 500pgs

Interface as Implicate Order – the Bush Mechanic's Cosmic Principle - The only book of David Bohm's that I have had some direct exposure to is 'Wholeness and the **Implicate Order'** which was a physicist's ruminations on the fact that everything in reality seems connected to, ***as in interfaced with***, everything else - in a great oneness - but only bits of that oneness are manifest to us ('explicate') at any given time, while the rest remains non-manifest ('implicate'' as potential). Thus it is a kind of ultimate systems theory of reality, and fits with various spiritual ideas like 'the ground of all being' and the 'noosphere'. For me as a confirmed agnostic, this kind of intimation of ultimate reality feels more plausible than conventional 'humanistic' formulations of the concept of God. [Blog 16-06-2008]

The most radical change in the notion of order since Isaac Newton came with quantum mechanics. The quantum-mechanical idea of **implicate order** contradicts **coordinate order** because Heisenberg's uncertainty principle made a detailed ordering of space and time impossible. [When you apply quantum theory to general relativity, at very short distances like ten to the minus thirty-three centimetres, the notion of the order of space and time breaks down]

Interface as enfilade - Japanese residential house design by the customer and builder is to achieve **Yashiki** [Jap – spread of rooms 58]/**Enfilade** [old French – to thread a needle - from Sennett (2008:259&263)] The sequence of, interface and flow between, rooms of a house so that one room yields gracefully to another – based on floor plan and door design, generally with a vista down the length of the building viz. Queenslander hallway ~ in all a crucial aspect of architectural design. The Japanese house is designed for living through incorporation of design to address a range of factors for both physical and spiritual living inc. the garden, 87 all contributing to a casual step like **Yashiki or enfilade.** Engel (1964:90) [30-06-2008]

Engel, H. (1964). *The Japanese House - a tradition for contemporary architecture*. Tokyo, Charles E Tuttle. 500pg

Interface as Techne an integral force for integration:

Consequently today in the West we need an **integral concept like this encompassing all creative forces of our industrial civilisation** just as the ancient Greeks called it, a 'techne' (characteristically the origin of the word ' technique') meaning all forms of 'real-ising-life' it its significantly dual English meaning of today, recognition of life and materialisation of life i.e. science and art. Engel (1964:481). Indeed contemporary industrial society requires an integral concept that will co-ordinate and **interface** its major formative forces, science and technique, as well as architecture and art, economy and politics. Such reappraisal of the spiritual basis of contemporary existence is imperative for all professions that play key roles in shaping of the human world. 482

Toolboxes and Libraries – the artificer as gameboy?

Libraries and toolboxes I am sure you will have much more informative views than me however you have asked a direct question so here is my response in brief -

For me they are profoundly important and profoundly different – libraries text/language the world they are noospheric not physiospheric in the 'hand' sense though they do have a physiographic substantative expression i.e. physical building and physical books cd's etc. We need to be clear about this the electronic or cyber cave/shed does not exist (this is the huge

challenge of Web2 – I spend a large amount of time going into this in my eBook) although it now is the repository of many artificer skills (intriguing dilemma even paradox as the MNA (memetic DNA) has transmorphed into the design parameters for computer games) unless the occupier actually move beyond text i.e oration, writing, booking, typing, manipulating a computer and so forth. [clearly libraries are now defunct as are Uni's if one considered their raison de'tre to be the font of all wisdom/knowledge there is more outside the unis on the web than inside]. The artificer is not herein a gameboy.

This is crucial that the artificer is about the hankind techneful transformation of the physiosphere – not about yet another berth in the noosphere. We must be very clear about this and use the bush mechanic as a lens to interpret and dissect and disaggregate these phenomena – in my view. Handkind in the sense authors such as myself use it in the sense that we define artifice and techne uses the physiospheric Exemplar Project to lense the meaning of Artifice. If the computer boffin designs/specifies and builds the computer as our IT manager does for our centres then this is physiospheric, a small but tectonic difference in my view. So the issue for me between libraries and toolboxes is who built each? Further seeing libraries as toolboxes is I believe perverse as this simply continues the Wilberian integral elision that the physiosphere can be left behind and that good learning and good spiritual development should do just this.

Daryl I don't expect more than 1 in a 100 people interested in the bushy to understand the above let alone endorse it. We have to in effect take this effort at discrimination and dis-elision to un-entangle and even juxtapose the two the noosphere and physiosphere to understand what we are losing and while acknowledging their synergistic equalitarian overlap. Pedagogy can't do this and Androgogy has been obliterated in Aust by CBT – Competency Based Training. In terms of this crisis as I/we see it I advocate for reverse discrimination in favour of the bushy – this is my stand this is my sacrificial anode so to speak – this is where I stand and have fallen – this remains of crucial moment to our thrival as a species and is outside pedagogy and Androgogy and academy.

Clearly though there is a synergy for the Artificer in the interface between the two but they are not to be conflated.

Living Machines – interfacing environmental sustainability and social creative evolvability

Clearly the move towards practical aspects of sustainability is extant and is as argued elsewhere in this series manifest in the likes of deep ecology movements, biodynamic farming and permaculture etc. In any gardening type exercise design is crucial and this is one of the great celebrations of this shard – environmental design because (a) it is necessary and (b) it has its homologue in nature with designing systems that manifest chaotic autopietical self organisation.

These have been extensively detailed in the relevant literature and consequently it is not intended to do so here other than to acknowledge that environmental designs incorporating humans are part of our indigenous heritage and are in our modernity a shard along with the multitude of others that represent collectively a post post post post modern w'holistic lifestyle.

(W'holistic in the sense of W'hole and 'Holy as in spirituality). Here we have a case where, through design, the interface of human built form and the environment. Authors such as Buckminster Fuller (http://www.bfi.org/), Mollison (permaculture) Todd (1997) etc, including also the earthship series (http://www.earthship.net/), as well as participatory nature artists such as Andy Goldsworthy (http://www.morning-earth.org/ARTISTNATURALISTS/AN_Goldsworthy.html), architects and sustainable architecture such as garbage warriors (http://www.garbagewarrior.com/) brilliantly, amply and ably demonstrate this interface. Here we have the emergence of concepts such as artificeotecture/artificosphere and biotecture/biosphere.

References

[NB: Extensive referencing is given in my eBook and in order not to make these ancillary documents cumbersome I have deliberately chosen to keep these references lists etc as brief as possible. **NB:** Furthermore this is not in any way meant to be belittling of these huge contributions nor is it meant to hubris my small contribution rather it is to highlight that my contribution for whatever it is or isn't worth, is to highlight with a walk my talk approach the importance of the Artificer in all her garbs and to identify the shards in our society where these energies remain as embers waiting for re-ignition in an emergent transmodern world]

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