

# Deep Craft ∞ Deep Skill ∞ Ontological Rehab: the Planetary Bricoleur, hyperobjects and craft sanctuaries

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**NB:** In my research: Bush Mechanic (Aust) ≡ Artificer (UK) ≡ Bricoleur (Fr) ≡ Tinkerer (UK/Fr)  
≠ Backyard Mechanic (Aust)

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## Deep Craft and its situating as counterpoint to our present day techno-utopian drift

When we use the term Deep Craft in this CRAFT issue we are describing a system of hand knowledge that is both intensive and extensive that is it works inside us as well as visibly without us. Here DC is in effect a skill based sphere (720 degrees) around us that linterlinks and overlaps with others forming DC affinity groups, CRAFT'ers circles and CRAFTy exchanges.

The key arenas for DC include content, process and praxis within our lived life. Thus, in particular the Exemplar Project, Governance, hand wisdom/knowledge in the context of the communities lived life, with sustainability and town planning in the sense of rural-urban or urban planning. So the key areas involved are, for instance the Bricoleur, Sociocracy, Artificer, Permaculture and Transition Towns.

The Bricoleur provides if it were a missing element in both Permaculture and Transition Towns. In both of these collectives, the need for a hands-on approach to re-crafting our future is recognised yet not fully articulated nor is it actually developed. I submit that the Artificer/Bush Mechanic is such a hands on collective that can most ably fill this gap/need/calling/vocation.

So the context for DC becomes Deep Skill and thus Planetary Bricoleuring (PB). So as with Adorno, progress becomes a process, not of reaching techno-utopian oblivion/orgasm/omega point but rather one whereby we become (re)aware of our own indigenoussness and transforming our 'supposed' mastery over nature to a partnership with Nature.

In this sense PB is a counterpoint to, for instance, Planetary Terraforming and Geo-Engineering so to speak, whereby we transform our planet along techno-utopian lines rather the reverse were terraforming occurs to us so to speak as per the Australian Aboriginals dreamtime mythos whereby ancestors lives become interwoven real-time with various terra/landforms. This is like the ancient Greek distinction between technique and techne viz. the craft person as the extension of the tool and vice versa. Here we seek the latter whereby the tools are an extension of us.

Today we find ourselves uncritically moving towards techno-utopian nirvana. The idea of progress in our modernity project since the Enlightenment has triumphed and tomorrow is going to be technologically bigger and better than ever (before). Somehow technology will overcome over population, environmental decline, global warring and warming, endemic violence and intolerance so embedded in the fabric of today's planet.

What we call for here is in effect a call for the situating of Planetary *Bricoleur* to be seen through the lens of an *Archaic Renaissance* providing a *site of resistance* whereby the *techno-utopian drift*, so ubiquitous today, can be critiqued with a *view to demonstrating that a better world is possible tomorrow for our children*.

We posit thus the Planetary Bricoleur as an authentic 'back to the future' approach, crucial to our planets survival.

### Technological Utopianism, HyperObjects, Morphogenetic Fields and Media Imaginaries

**Technological utopianism** (called techno-utopianism in this exhibit) may be seen as a **hyperobject**, an edifice of any ideology based on the premise that advances in science and technology will bring about a utopia. A techno-utopia is therefore a hypothetical ideal society, in which laws, government, and social conditions are solely operating for the benefit and well-

being of all its citizens, set in the near- to far-future, when advanced science and technology will allow these ideal living standards to exist.

TU then may be seen as a HO and the effect of chreodes thereon produce this said TU drift.

Examples of this TU drift include: epigenetic manipulation; post-scarcity economics; increasing reliance on robots to perform daily activities inc. work; genetic transformations; transformations in human nature through bureaucracy and control; the abolition of suffering, and even the end of death. Technological utopianism is connected with other discourses presenting technologies as positive agents of social and cultural change, frequently involving such constructs as **Technological Determinism (TD)**, **HyperObjects (HO's)** and **Media Imaginaries (MI's)**.<sup>1</sup>

TU then is a hyper-dominating discourse that crowds out other potential discourses such as Planetary Bricoleuring. As such TU comes close to totalising this field allowing say, within modernity, less than 5% 'discourse space' for alternatives.

MI's relate to: the creative and symbolic dimensions through which human beings typically create their ways of living together and their ways of representing their collective life and thus their and the planets futures. Imaginaries then are, in effect, chreodes viz. patterned convocations of the social whole. These deep-seated modes of understanding provide largely pre-reflexive parameters within which, in effect, channelise and guide the ways people imagine their social existence—expressed, for example, in conceptions of 'the planetary', 'the national,' 'the moral order of our time' and so forth. Much like a fjord in a fractal coastline, shapes and channels a glacier and to an extent vice versa.

**Hyperobjects** then are 'non-local' objects, which have a vitality to them, that guides developments in 'touchable' reality, yet you can't touch them, like race or class, climate change and ultimately even techno utopianism. Hyperobjects 'trans-dates' its own scientific measurement i.e. a HO is discrete from measurements that suggest its existence. Indeed such measurements may well only be 'perceiving' the HO's footprint on another object. In Systems Theory and Grounded Theory terms they are 'chunked-up' and as such occupy a higher dimensional space than the entities we perceive around us.

Furthermore HO's are so massive they refute the idea that space-time is fixed, concrete, and consistent. Indeed, they can dilate and dilute time and act almost as a type of memetic gravitational lens so that discourses are oblivious to the framing and shaping therefrom.

For example, global warming is formed by interactions between the Sun, fossil fuels, and carbon dioxide, among other objects. Yet, global warming is made apparent through emissions levels, temperature changes, and ocean levels, making it seem as if global warming is a product of scientific models, rather than an object that predated its own measurement.

Like space-time, the configuration or life development potential space for an organism isn't flat. In other words, not just any old thing can happen. Distinguish carefully between the lack of flatness, and teleology - which the configuration space doesn't necessarily have. It's possible that the configuration space is a 'real' object, a hyperobject in scientific terminology. For instance

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<sup>1</sup> **Media Imaginary** is 'the creative and symbolic dimension of the social world, the dimension by which medial creates our ways of living together and their ways of representing their collective life in simulacra viz. advertising and Hollywood which in turn derive from, and in relation to, hyperobjects. MI has some relationship to Zeitgeist.

*Sheldrake's morphogenetic field*, though one should note that one doesn't have to accept **morphogenetic fields** to accept **hyperobjects**.

We should expect these fields to be massively distributed in time and space, nonlocal, curvy, channelised and 'viscous' - paradoxical for observers in various ways. We should also expect them to be *physically real*, not simply mathematical abstractions.<sup>2</sup>

So in the sense of the PB in relation to TU one has to see the former as a form of what may be called 'post irony' in that one's (my) earnest intents, and indeed myself, have become, and are seen as, ironic even quaint and really quite silly, from the dissimulative perspective of the TU HyperObject. Consequently, it is my contention that DC and PB are, to a TU perspective, examples of this ironic distance, and thus readily dismissed.

### In search of a Deep Craft Hyperobject

The question remains though is there a HO that DC can be seen to be part of. This has been my inquiry for nearly 20years. In indigenous cultures, craft tends to be part of the social fabric of the culture and thus part of the spirituality thereof. Thus the burial inclusions of craft. In modernity cultures which are heavily reliant on robotics and computer communications, esp. Western ones, craft has, over the past 70+ years, disintegrated as any sort of coherent binding narrative. All that is left are well 'hobbies' seemingly unrelated dots of skill on the 'hand knowledge' landscape seemingly unrelated. Generally of kitsch, yuppie and decorative interest.

### Ontological 're-incarnation' viz. the Bricoleur planétaire

Somehow these, seemingly unrelated 'hobbies', will need to be 'joined up' and reinvigorated in order to breath some life back into the DC HO. In many regards this is an impossible task – certainly in my experience, yet with CRAFT we try..... So in effect, in modernity there is no viable DC equivalent of TU HO. Given the challenges of 're-animating' craft as a HO it may well be that some other form of recombinant meme is required. In this regard, we propose the PB, viz. the Bricoleur planétaire as a candidate for such 'ontological re-incarnation'.

### Deep Craft ∞ Deep Skill

From an Artificer perspective, Deep Craft (DC∞DS) is about the imbibing understanding and expressing of the six principles thereof. In a basic sense, skill is what is used to make craft. So skill and craft are strongly related (as above). Such Deep Craft can be, I submit, a mirror to our soul and our deep skills the way to express our soul in our day-to-day lives. This is, I further submit, the stuff of inner enlightenment and community cohesion.

In effect deep skills in the sense of this article means also broad skills of the Bricoleur that is to several related skill sets as well as a reflexivity in understanding the meaning the object thus produced has for self and the world. So one could say deep skills are spherical skill sets!

Such a fusion of the external and internal i.e. between hand outer skills, and psychological inner skills, is in many regards an epiphanic mediation redolent of the spiritual 'point of eternal return' and is explored in my three eBooks on the Bush Mechanic/Artificer/Bricoleur.

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<sup>2</sup> Sources: Wiki and see: <http://ecologywithoutnature.blogspot.com.au/2011/02/inertia-chreode-field.html>  
<http://cyborganthropology.com/Hyperobjects>

Clearly, such embodied skill sets link our inner world with our outer world and our social world this is again in many regards indicative of indigenous Zeitgeists’.

Finally and intriguingly this inner∞outer | me∞we type interinvolvement is the standard serve in much computer gaming.

## The Six Emergent Principles of Deep Craft

These six principles represent the **commonalities in process** I have identified in a 15-year research project applying Grounded Theory approach to some six Bricoleurs in Australia. Furthermore simultaneously they have been validated through a process of deep reflexion during extended periods of praxis by myself. For instance during a four year period building, fitting and servicing a boat/trailer/motors/tow vehicle etc.

By applying Grounded Theory to entries in a learning journal made in the field as I built my own Exemplar Project (a boat) under the guidance of a Bricoleur and under the supervision of a respected Academic Elder Dr. Bob Dick. In the following we see embodied participation through a perspective that recognises Hand, Heart and Head, generally, in that order as vital to understanding the pattern that connects different types of artificers, and that can lead to transformative outcomes.

Indeed Dr. Wildman argues that *the urge to create/fabricate/make/bricoleur* and relate is a *fundamental human right*. This *will to create* is foundational in understanding what it is to be human and indeed he argues as such it/this manifesto should be recognised as a ‘**human right to bricoleur**’ where as it has been excluded from most education, social, religious and economic relations which all valorise abstract thinking, ideas and grand theory. He argues this distortion needs to be redressed urgently in individual and community projects with the following principles, as they emerged from his grounded research over the past 15years:

- 1. Exemplar Project Principle** – *Exemplar Category – journeyman’s piece*
- 2. Inner-Outer Worlds Principle** - *Individuation Category – outer doing∞ inner knowing*
- 3. Social Holon Principle** - *Relationship Category – mutual aid*
- 4. Global Problematique Principle** - *Planetary category – the big picture our project fits into*
- 5. Harmonisation Principle** - *Harmony category – the parts fit together*
- 6. Deep Learning Principle** - *Learning category – learning from doing*

Today we find the **shards** of what used to be a much wider and cohesive distribution of Bricoleurs. Several of these I have identified include: (1) **Bricoleur** (techne/artifact builder<sup>3</sup>; P1); (2) **Agape Artificer** (relationship/nurturance facilitator; P3); (3) **Eco-Artificer** (ecological praxis; P4); (4) **Artisan-Artificer** (artistic, artisan specialist; P1), (5) **Community-Artificer**

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<sup>3</sup> Techne’que in this sense means where a tool is an extension or expression of the human not as in Techni’que where the opposite is the case and although this distinction was hugely important for the Ancient Greeks and tragically today we have lost this discernment and indeed whole societies have become expressions of la’technique.

(community animateur; P3), **Green Activist/Social Justice Crusader** (P4), (6) **Systems Design practitioner** (P5); (7) **Pedagogical artificer** (learning, education; P6).

**NB1:** These Principles are drawn from Wildman, P. (2005b) below.

**NB2:** Please see Appendix B in this regard.

## Deep Craft and AI

Today most people in the environment movement (and other church denominations) do not understand that AI is a real threat to humans and the effects will impact us *well before* the longer term climate effects like sea level rise which will, most likely, be more gradual. Earth's natural feedback mechanisms are buffering and delaying some of the climate change.

AI and its associated technology does not have such feedback unless humans rebel against technology and I do not see much evidence of this yet. We have never before seen such a massive converging of technologies like this & the key difference is its intelligence, efficiency and autonomy.

If you look at the impact of technology in our lifetimes and the current rate of change, AI in its many subtle guises is happening now and I expect it will, in the next 100 months, accelerate and impact us like a Tsunami. Such that we will have no ethical bearings. In addition, most importantly no understanding of 'what it is to be fully human before the elite become trans-human with life extension.

Deep Craft then is one crucial aspect of becoming fully human. Indeed, we need to preserve Nature as the visible shape of humanness, as a reference for feeling and awe, and crucially as the gestalt of our own psyche. Without Nature, we risk losing important parts ourselves, our identity and ultimately our humanity. Thus, we risk losing our ability to love. Weber, (2016:348)

## Deep Craft and Archaic Renaissance

In relation to what it is to be fully human relation I submit that deep craft has a crucial role to play therein <http://www.crafters-connect.com/craft-issue-8/> on Archaic Renaissance. Also see article on Planetary Bricolage (French for tinkering/craft/artificer/Bush mechanic (Australian)) on top right. That is the Archaic Renaissance is, from this perspective, an expression of the epitome of the role that craft skills can play in this juncture in becoming historically fully human.

## Bricoleur planétaire, Deep Craft and Craft Sanctuaries

Next One thing's for sure: when it comes to developing AI, there's an urgent need for more thinking, more consideration, a broader diversity of viewpoints. In developing AI tools, can we program them to value the creative act of human perception — the authentic, the spontaneous, the unpredictable? Or maybe as Amy Webb, a tech futurist at New York University, has recently proposed, we should establish data sanctuaries. Here, like in nature reserves, our data could roam wild and free, relatively untouched by AI, governments, corporate interests viz. the dreaded Monsanto effect.<sup>4</sup> Here we can see, I submit, a direct link to the need to provide craft/hand knowledge sanctuaries. Where our craft's could roam wild, free, and indigenous largely untouched by AI, governments or the dreaded corporate interests.

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<sup>4</sup> Developed from: <http://www.abc.net.au/news/2017-12-31/ai-is-learning-from-our-encounters-with-nature-/9291708> AI is learning from our encounters with nature — and that's a concern by Andrew Robinson 31-12-2017

Here we have a type of memetic craft oriented counterpart to the genetic sanctuaries we see in national parks and wildlife sanctuaries.

## Deep Craft and Occupational Rehab

DC and OR have much in common. These synergies are mostly positive, esp. the focus on Occupation and Chiro focus that is hands on learning. Some crucial differences though include: (1) The therapy concept is coterminous with the participants that is there is no professional class so the DIY nature of DC is in the realm of co-counselling for instance a form of collaborative creativity

(2) the extension of ‘occupation’ to ‘ontology’ that is DC is about being fully human in an existential sense rather than uniquely and exclusively in regard to injury recovery.

(3) DC sits alongside our neo liberal capitalist system, reductionist science and professionalised practice and is not, I submit, unlike OR, inherently embedded therewith.

### From Occupational Therapy to Ontological Therapy to Deep Craft

This is the process progress the vignettes will seek to identify that is the use of ones occupation to understand what it is to be fully human and thence to identify with one’s deep craft abilities. So as with (2) above the extension of ‘occupation’ to ‘ontology’ that is DC is about being fully human in an existential sense rather than uniquely and exclusively about injury recovery.

So to a significant extent this approach maintains that ontologically<sup>5</sup> one becomes a human being by being a human doing and having that broadly defined occupation, reflexively feedback and thus forward into ones becoming a fully human being.

### Deep Craft in an indigenous context

Consider the making of a stone axe today in a Paleolithic indigenous tribe or 2.5mybp in a tribe making Oldowan stone tools. Here DC relates to creativity, social context, environmental necessity and knowledge, planning, agency and futures, abstract thinking, links to ceremonial cycles and so forth – both horizontal and vertical aspect of our ‘lived life’ – head, heart, hand hearth i.e. intellectual, emotional, practical and familial (inc. community).

*Just how ‘creative’ does, one need to get in order to make sharp flakes from rocks? Actually, it is a lot harder than it appears, especially if it has, so far as you know, never been done before. The most common ‘Oldowan’ tool is a sharp stone flake created by striking a stone core (often called a cobble) with another stone, called a hammer stone. In order to make these efficiently you need to be able to do a number of things in sequence. First, you have to find a core and hammer stone of a good size, shape, and composition.*

*Not all stones are equally good for making flakes, as density, grain, and crystal structure vary across types of rock. That means you need to search for, locate, and repeatedly go back to the same sources, or at least be able to access the same rock types and sizes, in order to get the best raw materials.*

*Once you collect the basic stones, you need to find a safe place to make the tools (a loud and intensive process—try smacking rocks together quietly). Remember, there were many large*

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<sup>5</sup> **Ontology** is the [philosophical study](#) of the nature of [being](#), [becoming](#), [existence](#), and thus [reality](#), as well as the basic [categories of being](#) therein and their relation to one another (Wiki).

*predators living in the same time and place as early Homo. Making the flakes presents a series of challenges. First, one must examine the core for shapes and patterns in the rock, selecting the specific site to strike the core to create the best flake. You have to support the core in a certain way to get a clean strike.*

*You have to grip and swing your hammer just so. It is an art. Once one flake has been detached, one has to repeat the whole process again, but now with a modified core and a new set of possibilities: New shape of the core, new options for where to hit it, and the whole set of steps in the flake-production process starts again.*

*Today it usually takes university students many, many hours or even weeks to learn to reliably make good Oldowan tools, and this is with instruction from a skilled teacher, using language, video guides, and books and already having the best materials delivered to the lab or classroom—things that none of our early ancestors had. University students do not have anything trying to eat them either.*

*This simple hand use based stone toolmaking process opened up a space for our ancestors to grow their brains and increase social and cognitive complexity: two core features of our evolutionary history.*

Fuentes, A. (2017). *The Creative Spark: How Imagination Made Humans Exceptional*. New York, Penguin Random House. 280pgs. Locations 865-874

## Deep Craft and the CRAFTy vignette series

### Intention

To implement:

**1 Big Picture:** the CRAFT Big Picture Intention document/vision by providing a counterpoint to TEDx called CRAFTy

**2a CRAFTy vignettes** to comprise similar length to TEDx vignettes of 20mts max with, **2b** shooting being located within the Exemplar Project with the bricoleur/artificer/bush mechanic *in situ*, and not on a stage etc. as per guidelines

**3 Logistics:** for mounting on a uTube channel @ the rate of one per month for 3 mths then review

**4 Resourcing:** Interviewer and interviewee voluntary (petrol/tolls/food/travel/accomod. paid for), production at my expense say up to \$100/vignette, Web etc. costs – inc. my time pro bono (PW)

**5 CRAFTy vignettes are a program of ADC** – Aid Development Channel, yet remain the property of Kids and Adults Learning Pty Ltd

**6** To showcase **indigenous craft and CRAFT** as part of a cultural context e.g. the Australian Bush Mechanic

**7 CRAFTy** however, is more than only a counterpoint to TEDx. It is also an opportunity to **spotlight and curate what humans can do with their hands in the face of a threatening advent of AI and smart machines**. A show case of what hands can do including inc. making the robots/ smart machines where relevant as an example!!

Meaning of 'craft'

Like many ‘hands on words’ today craft can be taken both ways positively and negatively. So ‘craft’ means both (a) skill/dexterity in making things by hand, and (b) handiwork i.e. skill in deceiving others. Other meanings deriving from (a) above include; tinkerer (bricoleur), artisan (dexterously specialised in one skill arena), artificer (dexterously generalised in several related skill arenas), boat, guild i.e. members of a skilled profession, denoting something made by hand e.g. craft beer/baker etc. Nowadays crafters are often called artisans.

From ‘artisan to artificer/bricoleur’ – deep craft

An artisan expert in several related fields/skill sets is called herein an artificer and indigenous terms in Australian. These folks are called Bush Mechanics who also care for other in likewise circumstances, while getting a ‘buzz’ from their craft and linking this to how their craft ‘save the world even’, and seek to learn from all this and help others do likewise!! This is what we call ‘deep craft’ and what we seek to explore in this vignette series.

How then do we seek to explore ‘deep craft’ in this series?

Here we take and explicate in our vignette series is about (b) above the ‘c’ meaning of craft, AND especially we seek to identify how craft relates to the ‘craft of craft’ so to speak i.e. the big picture behind ‘c’raft i.e. CRAFT (*Community Resilience through Artificering for Futures Transitions*) that is the CRAFT of craft that is the big picture behind individual crafter activities. See also: <http://www.crafters-connect.com/craft-issue-8/> for back-grounded research that these vignettes are based on. And <http://www.crafters-connect.com/craft-issue-9/> for the idea of the Big Picture behind craft that is the space that holds, or Doula’s, the actual crafter activities.

Proprioception as a craft sanctuary

Proprioception is the ability to know the spatial orientation of various parts of the body, especially the head, hands, legs and feet. The Planetary Bricoleur and to a more substantial extent Occupational Rehab are involved directly in proprioception *and its context* as rehabilitation towards, and sanctuaries for hand knowledge and body wisdom. I would extend the meaning of proprioception to include awareness of and ability to use our body’s position in space.

Recognition of proprioception will be a key part of the vignette series.

Six to four questions

Developed from these six principles of the Australian Bush Mechanic/Artificer/Artisan/Bricoleur. CRAFT means *Community Resilience through Artificering for Futures Transitions* and in particular, my research has indicated CRAFT has the following aspects/principles.

- 1. Exemplar Project Principle** – *Exemplar Category – journeyman’s piece of arts & crafts through ‘adult play’ (collaborative creativity); the exemplar as ~ group self-therapy as in a Men’s Shed; ~ ‘occupation’ as individual and collective ‘self and co therapy’; ~ occupation as justice inc. play, wellness, motor, agency/efficacy, planning, hand writing, and coping skills; ~ occupation as holon; exemplar as synthesis & synergy rather than reductionism & parts*
- 2. Inner-Outer Worlds Principle** - *Individuation Category – outer doing∞ inner knowing*
- 3. Social Holon Principle** - *Relationship Category – mutual aid*
- 4. Global Problematique Principle** - *Planetary category – the big picture our project fits into*

**5. Harmonisation Principle** - *Harmony category – the parts fit together*

**6. Deep Learning Principle** - *Learning category – learning from doing*

## Appendix A: Hyperobject attributes

### Definition

**Hyperobjects** are objects which have a vitality to them but you can't touch them, like race or class, or climate change. Their effects may be experienced even if they cannot be necessarily touched. For instance in *Alien Phenomenology* Bogost writes that, 'ethics itself is revealed to be a hyperobject: a massive, tangled chain of objects lampooning one another through weird relation, mistaking their own essences for that of the alien object they encounter, exploding the very idea of ethics to infinity.'

'Timothy Morton, professor of literature and the environment at the University of California, Davis, became involved with object-oriented ontology after his ecological writings were favourably compared with the movement's ideas. In *The Ecological Thought*, Morton introduced the concept of hyperobjects to describe objects that are so massively distributed in time and space as to transcend spatiotemporal specificity, such as global warming, styrofoam, and radioactive plutonium.

### Five Attributes of HO's and their relationship to TU

Morton has subsequently enumerated five characteristics of hyperobjects:

**1 Viscous:** Hyperobjects adhere to any other object they touch, no matter how hard an object tries to resist. In this way, hyperobjects overrule ironic distance, meaning that the more an object tries to resist a hyperobject, the more glued to the hyperobject it becomes. *TU as a HO can be seen as viscus by its rendering my interest in PB as ironic and distancing itself therefrom so as not to have to even engage any aspects thereof.*

**2 Molten:** Hyperobjects are so massive that they refute the idea that space-time is fixed, concrete, and consistent. *TU as a HO can be seen as molten in that TU in effect alters scientific time and space so as to negate say craft critique and enhance its own momentum.*

**3 Nonlocal:** Hyperobjects are massively distributed in time and space to the extent that their totality cannot be realized in any particular local manifestation. For example, global warming is a hyperobject that impacts meteorological conditions, such as tornado formation. According to Morton, though, objects don't feel or see global warming as a HO, but instead experience tornadoes as impacts and results thereof i.e. the damage they cause in specific places. Thus, nonlocality describes the manner in which a hyperobject becomes more substantial than the local manifestations they produce. *TU as a HO can be seen as NonLocal in that it is experienced as f2s that is the local result of the non-locality of the TUHO.*

**4 Phased:** Hyperobjects occupy a higher dimensional space than other entities can normally perceive. Thus, hyperobjects appear to come and go in three-dimensional space, but would appear differently to an observer with a higher multidimensional view. *TU as a HO can be experienced yet not seen it is a chunk up, in systems theory, from the litany of symptoms and as such can't be directly perceived rather it is a force field and we experience its impacts/footprints viz. like gravity.*

**5 Interobjective:** Hyperobjects are formed by meta-relations between more than one object. Consequently, objects are only able to perceive to the imprint, or 'footprint,' of a hyperobject upon other objects, revealed as information. For example, global warming is formed by interactions between the Sun, fossil fuels, and carbon dioxide, among other objects. Yet, global warming is made apparent through emissions levels, temperature changes, and ocean levels,

making it seem as if global warming is a product of scientific models, rather than an object that predated its own measurement. *TU as a NO is a relationship between C,I&T (Computers, Information processing and associated Technologies) as an expression of the Enlightenment it is experienced as Facebook, the web, messaging, GPS, twitter and apps etc. It is also seen as an expression of G,N&R (Genetics, Nanotech, and Robotics) and is experienced as CRISP genetic manipulation of children's DNA, life extension, defect elimination in utero and robotisation of workstations with consequent 'end of work' type scenarios. So there is an interactive relationship between TU as a HO and its manifestations/expressions as the latter, which, at once show the shape of the TUHO yet simultaneously are caused thereby.*

In addition, filmmaker Gabriel Shalom defines a Hyperobject as 'Something that can be in more than one place at once', and adds the Internet to the list of Hyperobjects.

**Source:** <http://cyborganthropology.com/Hyperobjects>

## Appendix B: The Six Emergent Principles of Deep Craft - expanded

With the spotlight on Australian values, now is the perfect time to report the development of a new approach to futuring that is based on the uniquely Australian concept of the ‘bricoleur’. Dr Paul Wildman of Brisbane has been working on this idea since the 2000, with specific research aimed at seeking to identify commonalities in process between several bricoleurs (see six principles below)

This action oriented research in futures beginning in 2002. The ‘bricoleur’, or artificer approach to futuring is one that he his research indicates as having immediate practical outcomes for practitioners and their environment, at the same time as it develops a body of expertise that will stand us in good stead in any future emergency.

‘In Australia there is a term for someone who links thinking and doing, and can act forward wisely and solve problems with what is available while developing innovations in the field that respond to broader needs,’ he explained in an article in the *Journal of Futures Studies* (August 2005).

‘A bricoleur is committed to self-reliance and excellence at her task and is not to be confused with a ‘backyard mechanic’ who does shoddy work. And a Bushy can look both ways to the mechanic and the bench and to the bush to find patterns in nature as with indigenous folks.’

‘Bricoleur in the Australian vernacular means in German Volk Handwerker. Mechanic can be translated as Arbeit or labour or Handwerker – a chiro-ist so to speak. Intriguingly Mechanic is also a cognate of Spiel or play as Mechanisch. So we have the tri-unity of Mechankier (practical person), Mechanic (Handwerker), and Mechanisch (as in play).

Dr Wildman is deeply concerned about the separation of learning and practice as well as the commercialisation and focus on school NAPLAN scores not student development that has taken place in Australian and indeed western education systems over the past generation.

Kids and Adults Learning today is essentially playless, handless and anti-practical. Indeed play has just been eliminated even from pre-school curriculum with the advent of the national preschool curriculum – yes completely eliminated yes for kinder that have been on earth for 48mths yes 48mths is deemed too old for play. For me this is the final decay of culture into an amorphous centralised elite controlled Animal Farm. We have to DIY now there is nothing else ‘left’.

‘We have found that, in conventional social innovations, up to 90% of our energy is absorbed in action as implementation and compliance rather than design and making or (re)conceptualising an idea. So we prefer passive reacting to Government rules rather than innovation this leads to more and more recycling rather than reuse or repair. This is hugely wasteful of embodied energy in our homes, cars, tools, food and equipment. So rather than repair and sharing use as in the Sharehood and Bricoleurs we bow to planned obsolescence and throw away and buy a ‘new’ model.

‘This compares with up to 90% of the energy expended in the conventional education process as conceptualisation not action. This functional structural mismatch in education (action-less conception and concept-less action) has emerged over the past 200 years and has been identified and explored by many educational innovators. But we have not yet applied the understanding adequately to futures/foresight.’

The ‘bricoleur’ approach to futuring proposes re-braiding ideas and action in projects aimed at improving the future. This is a lost art/map where chiro (the hand) drove cogno (our brain development) – today much of science and basically all of the social sciences see it as the other way round.<sup>6</sup>

‘In effect, this is a post-industrial form of what in medieval times was called ‘artificing’ -- a Middle Age precursor to today’s technician’, Dr Wildman told *Future News*.

‘By placing futures, and futures learning, within the context of practical work we can put thinking and doing back together again, re-braiding them in a practical approach to innovation. Ideally, the learning that takes place in these practical approaches will be captured in a collection of ‘exemplar projects’, equivalent to the artificer’s ‘master piece’. So in the case of the bricoleur her standpoint is firmly her actions (not intentions, plans, articles or books – rather actual actions towards a better world) towards establishing an ‘exemplar project’ that demonstrates that a better world is possible tomorrow for our children – a future Nature can live with.

‘It is my hope that the concept of bricoleurs will help to demonstrate how such an ancient approach to futuring can help create a better tomorrow today -- a future our children can live with.’ After the apocalypse whether it be peak oil, civil breakdown, global warming a world made by hand will be crucial.

With a strong background in action learning – another powerful concept developed in Australia – Paul Wildman has approached this initiative using ‘Grounded Theory’. This differs from other research because it works from the bottom up. In other words, Grounded Theory does not test a hypothesis. It sets out to find what theory accounts for the research situation as it is observed in the field. In addition, it does this by establishing key categories/patterns in one’s field notes. Paul undertook this research under the watchful eye of Assoc. Professor Bob Dick. Like action research, its aim is to understand the reality, to discover the theory implicit in the data.

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<sup>6</sup> **A New View of Newton:** ‘It was Plato who introduced ‘the division between those who know and do not act and those who act and do not know’, Paul Wildman explained in his article in the *Journal of Futures Studies*. ‘After Plato in the West we have doggedly followed a staunchly mechanist view, identified with Newton, that ‘The Universe was a mechanical one whose order was maintained by a distant God’. Newton in fact wrote more on alchemy than mathematics: he saw the universe tinctured and enlivened by emotion and love.

These works remain unpublished. The results of this split are readily seen today in terms of the specialisation of skills, separation of academia from actual social change projects, separation of producing from consuming e.g. we are moving rapidly away from being ‘prosumers’. So having our own gardens, making our own clothes, sharing our equipment and abilities as in the Sharehood and permaculture and other bricoleur type activities.

Another key feature of the ‘bricoleur’ approach is that it is specifically located within a conscious awareness of the ‘global problematique’ (see page 1), indeed it is a form of what Dr Wildman calls ‘craft Koinonia’. The nesting of individuals and societies within this global holarchy, and clear recognition of the need to address problems in today’s world in order to create a better future.

**[Paul Wildman is collecting exemplar projects. He has developed an evaluation form based on the results of his research using the following six principles. Practising members of the Futures Foundation who would like their projects included are invited to contact [paul@kalgrove.com](mailto:paul@kalgrove.com) and <http://www.kalgrove.com/adultlearning/> -here the results of this research are available in the public domain and with open global commons copyright]**

### **THE SIX EMERGENT PRINCIPLES OF BRICOLEURS**

These six principles represent the **commonalities in process** Dr. Wildman identified in decade long Participatory Action Research study of six Bricoleurs in Australia. By applying Grounded Theory to entries in a learning journal made in the field as he built his own Exemplar Project (a boat) under the guidance of a Bricoleur and under the supervision of a respected Academic Elder Dr. Bob Dick. In the following we see embodied participation through an Integral perspective with an eye and hand to transformative outcomes.

#### **1. Exemplar Project Principle – Global Problematique**

Learning from the doing of the bricoleur is captured and preserved in ‘exemplar projects’. The bricoleur’s textbook is learning enacted where in thinking and doing are braided together in the EP that exists in the ‘real’ or physical world not only in the mind. An EP can be on an individual or community basis and shows in a ‘concrete manner that a better world is possible tomorrow for our children’. Here we have broad skills i.e. related skill-sets necessary to join the dots on an EP. The Artificer becomes a prosumer extraordinaire – producing and consuming not a dependent consumer. *Exemplar Category*.

#### **2. Inner-Outer Worlds Principle**

Such that the exemplar project can be seen as ‘walking ones talk’ and acting as what may be called a psychonaut linking one’s inner ‘I’ and outer ‘that’ realms of being – an exploration, manifestation, reification even ‘self-realisation’ and ‘individuation’ of so to speak. A Bricoleur’s work blends internal and external ethics, for example, redefining psychological markers such as autonomy, agency, responsibility income, status, time, task etc. *Individuation Category*.

#### **3. Social Holon Principle**

The exemplar project is seen by the bricoleur as an example of a social holon -- a self-organising nested system which is simultaneously part and whole, hierarchically situated yet autonomous, using fixed rules yet flexible strategies, such as the heart in the circulation system of our body. For the artificers I worked and studied with this involves a certain ‘collaborative autonomy’. *Relationship Category*.

#### **4. Global Problematique Principle**

The bricoleur sees herself as a global citizen, locating the EP in a global and indeed Gaian context. And responding the challenges of the Global Problematique by being systemically and ecologically aware and acting locally, concretely, participatively, anticipatively and proactively, through the design building and use of ones exemplar project. *Gaia category*.

### 5. Harmonisation Principle

Here we have harmonisation of diversity rather than the centralisation of conformity whereby all the various sub-systems involved in the exemplar project fit together i.e. interface efficaciously. This includes resources and its use and users, have to fit in the overall ‘pattern language’ ‘D’esign like a ‘golden mean/thread’ together/harmonise/cohere. This is the principle of ‘dynamic balance’, systems design and is the integral principle. *Harmony category*.

### 6. Deep Learning Principle

Learning, yearning, earning and concerning link together with all of the above and this includes learning from and within the engagement of establishing the exemplar project and its place in the lived life of the Artificer and her community viz. Life Deep Learning. *Learning category*.

Today we find the shards of what used to be a much wider and deeper distribution of Artificers. Several of these I have identified include: (1) **Bricoleur** (techne/artificact builder; P1); (2) **Agape Artificer** (relationship/nurturance facilitator; P3); (3) **Eco-Artificer** (ecological praxis; P4); (4) **Artisan-Artificer** (artistic, artisan specialist; P1), (5) **Community-Artificer** (community animateur; P3), **Green Activist/Social Justice Crusader** (P4), (6) **Systems Design practitioner** (P5); (7) **Pedagogical artificer** (learning, education; P6). There may well be others however in all instances the pattern that connects is, I submit, to large extent identified in the above Six Principles with a particular one predominating in each of these respective types.<sup>7,8</sup>

This is the challenge for the next generation Dr. Wildman said as if we are unable to reintroduce these principles in to our earning, yearning and learning activities individually and collectively not only will we have failed our children’s children we will have failed Gaia. Consequently deep environmental and socio-economic change will be unavoidable.

**NB:** This section is an extended version of: Wildman, P. (2005). Bricoleurs: Futuring the Australian Way. *Future News*, September

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<sup>7</sup> We can also see this pattern, to greater and lesser extents at play in emergent sub-cultures such as hackers, punkers (cyber, steam etc), preppers, survivalists. There is however, two sides to this coin and in some instances the Artificer can be seen as negative such as a jihadist.

<sup>8</sup> Hanna Arendt (1963) claims this is the challenge for modernity: to re-braid thinking and doing.’ The Bricoleur welcomes such a challenge. And Adorno (2003:xxvi) from *Can There be Education after Auschwitz ~ To see the newness of the old as well as the oldness of the new.* It is in initiatives such as Sharehood, Permaculture and Bricoleurs that we see the new in and from the old. All of these initiatives are outside and alongside the mainstream business, education, and maybe it is on the periphery that we should look for ways to take us forward through the approaching miasma. This is for me a potent test of authenticity.

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