

Preparing for the Anthropocene Transition

Kenneth McLeod, July 2016

“The point is not to think outside the box but to recognise that the box itself has moved, and in the 21st century will continue to move increasingly rapidly”

Timothy Seastedt, *Frontiers in Ecology and the Environment*, 2008



Image: The Banker, Jason de Caires Taylor

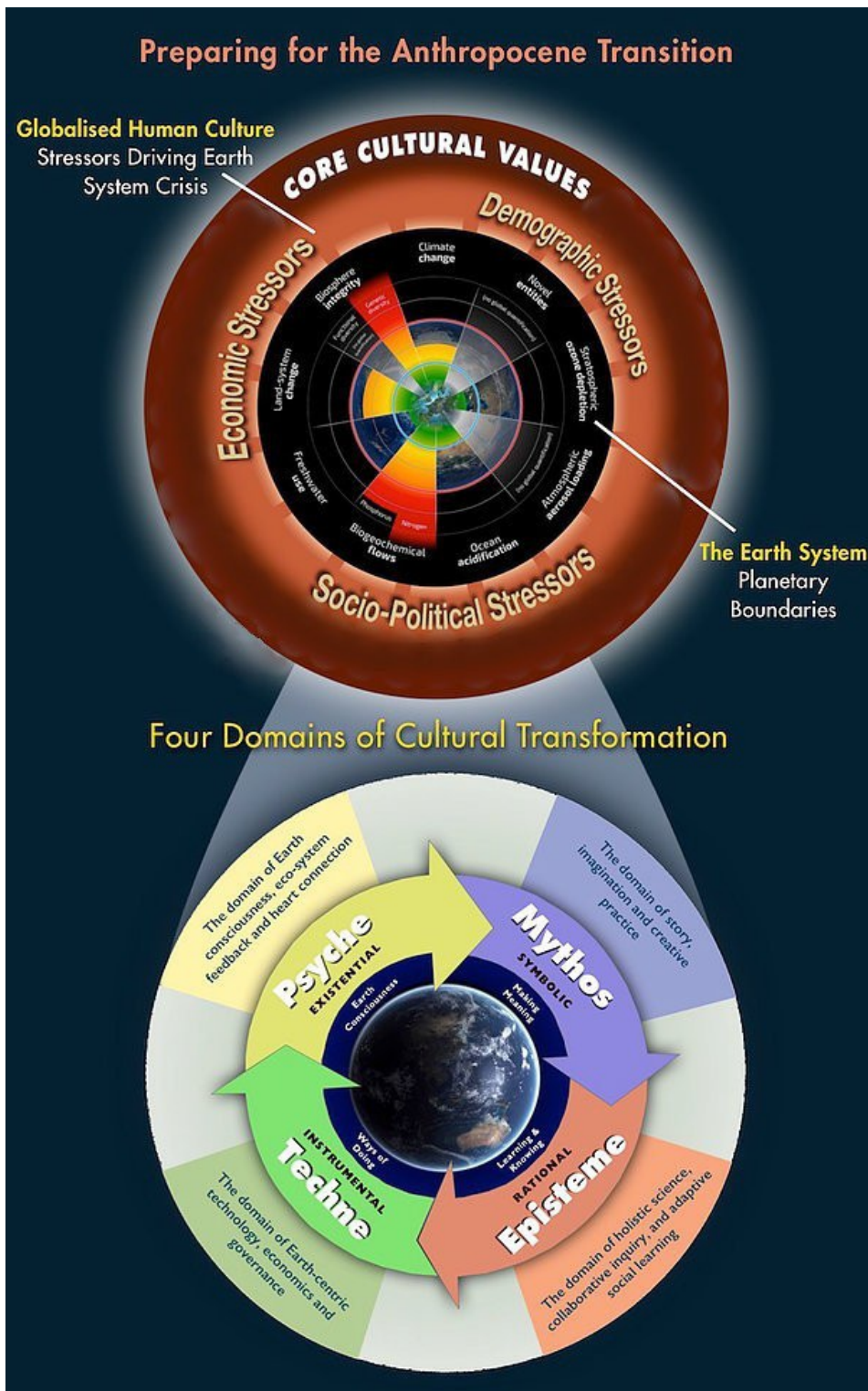
The term ‘Anthropocene’ arose from the Earth sciences and has been widely adopted across the social sciences and humanities.

In the Anthropocene human activity is outstripping the biosphere’s capacity to maintain the relative stability we’ve known during our species’ long journey through the Holocene. Our impacts are pushing the Earth System towards rapid, unpredictable and potentially catastrophic state changes beyond the evolutionary experience of both humans and many other species. The consequences will be irreversible and likely to persist for thousands of years. Four words capture the character of this age: **unsafe, uncertain, interdependent, and co-creative.**

The Anthropocene transition can be thought of as a shift from a prevailing cultural space to a new one appropriate for the continuing evolution of human societies in symbiotic relationship to the Earth. It is likely to extend over multiple generations and its ultimate outcome is unknowable. Such a historical transition can be likened to the shift from the Medieval worldview to the Renaissance.

Thinking, learning and doing in transition times

Transition times when the old order strains and fractures – when one of the few certainties is that business-as-usual is not an option – can also be ages of heightened creativity, of intellectual and spiritual breakthroughs, of new cultural syntheses. This is the challenge of the Anthropocene transition – to equip our communities, our professions, and our institutions with new tools for thinking, learning and doing.



Our understanding of Earth System disruption is derived from the physical sciences – physics, chemistry, biology, geology, etc. As a result we turn first to those domains to find solutions. Thus our focus is on such areas as emissions reduction, renewable energy, habitat protection and, at the extreme, geo-engineering.

Many of these measures are essential, but they are not enough. Ultimately the crisis in the Earth System is driven by a deep conflict between the core values of the dominant globalised human culture and the life support systems of the planet.

The model on the left is an attempt to create a framework for thinking about a much wider spectrum of cultural transformation over a longer time span.

Built around up-to-date research on the planetary boundaries we have already exceeded or will soon do so, it identifies three main stressors in the dominant human culture that are driving Earth System disruption: Economic, Demographic, and Socio-Political.

Economic stress from our dependence on continuous growth in output and consumption to maintain economic, social and political stability while in the process widening income gaps between rich and poor, poisoning the biosphere with intractable waste, and generating endemic financial instability and market volatility.

Demographic stress arising from global over-population, marked differentials in population growth between rich and poor countries, a destabilising mismatch between population growth and viable livelihoods in poorer nations and regions, the runaway growth of crisis-prone megacities often vulnerable to climate change impacts and recurring epidemics, and large-scale population movements spurred by population pressures, poverty, conflict, human rights abuses, and environmental degradation.

Political and social stress as competition for scarce resources and disputed territories intensifies, international power alignments shift, inter-communal and sectarian strife escalates, food and water insecurity spreads from poorer regions, and populations are displaced. "The driving force [of the climate crisis] is a society based on class, inequality, and acquisition without end." (Foster, Clark & York, 2010)

These collective human behaviours are manifestations of core cultural values. It is at this more fundamental level that transformation in the dominant culture is necessary for our species, and many others, to survive the Anthropocene transition.

Canadian political scientist Thomas Homer-Dixon in his 2006 book *The Upside of Down* coined the term 'catagenesis' to describe "the creative renewal of our technologies, institutions, and societies in the aftermath of breakdown". But do we have the tools to

approach this process in coherent and creative ways? Or will we retreat to the reactive and essentially destructive modes of thinking and behaving so often seen in our history?

As a starting point for this discussion this paper offers a four domain model for thinking about cultural transformation, and a values framework for Anthropocene transition inquiry.

Four domains of cultural transformation

Given the nature of the dominant globalised culture driven as it is by ever increasing growth, consumption, accumulation and control, it is perhaps inevitable that most public engagement with the big systemic crises of our times tends to focus on technology, economics and politics.

We are accustomed to thinking that it is in these arenas that change is driven or resisted and thus they are where we must concentrate our efforts to contest and transform the status quo. But this focus is much too narrow. The complex, multi-scale, inter-related challenges we face in the Anthropocene require more than ad hoc political, economic and technological fixes.

Culture is a civilization's shared way of making sense of the world: of what is real, what is knowable, and what has value. It conditions our ways of being, seeing and doing. It determines what we consider appropriate action in and on the world. It defines the taken-for-granted limits of the possible and the acceptable.

Changing our shared culture — "the way we do things around here" — involves more than "sustainable" business models, low carbon economies, and appropriate technologies. All these are vitally important areas of innovation in this age of transition. But in themselves they are not sufficient. Our challenge is ultimately to rethink our core cultural values and how they translate into action in the world.



The four domain model of cultural transformation offered here is simply a tool for thinking about how we approach the needed cultural renewal with consciousness and intention. We need to effect fundamental value changes in all four domains.

Psyche : Existential

The domain of Earth consciousness, sensitivity to eco-system feedback, eco-social interdependence, and identity.

Mythos : Symbolic

The domain of mytho-poetic story, imagination, creative practice and world-making.

Episteme : Rational

The domain of holistic science, collaborative inquiry and collective learning.

Techne : Instrumental

The domain of life-centric technology, economics and governance.

A values framework for the Anthropocene

As we set about preparing for the long-haul of the Anthropocene transition we need to consider the core values that can frame our inquiry and experimentation. The following four principles are offered as provisional guides for these explorations. They correspond to each of the four domains of cultural transformation:

1. Earth sovereignty

Sovereignty is a foundational concept for our systems of jurisprudence and international relations. But its expressions in the sovereignty of the nation state since the Peace of Westphalia in 1648 and the sovereignty of the individual according to some readings of the US Constitution of 1787 have become inimical to the viability of our own species and many others as well.

A new conception of sovereignty vested in the Earth and asserting the preeminence of respect for all life and the integrity of the biosphere has become a necessity. Such a definition of Earth sovereignty as prior to and more fundamental than human agency would provide a basis on which to reframe all our doctrines of authority, justice and responsible governance.

2. Eco-mutuality

Eco-mutuality is a core relational principle that recognises the need to nurture and sustain a mutually enhancing human-Earth relationship as the very basis of human cultures. It incorporates the principle of equity but extends it beyond the sphere of social relations to embrace our inter-dependence with all living creatures and the eco-systems of which they are an integral part.

Eco-mutuality transcends the essentially anthropocentric and utilitarian concept of sustainability to recognise the intrinsic value of all life forms within the socio-ecological wholeness of the Earth System.

3. Holism

Holism is an epistemic principle that emphasises the intrinsic coherence of complex systems and their emergent properties that cannot be understood from a knowledge of their parts. It implies that the system as a whole determines in important ways how the parts behave, even while the parts condition the nature of the whole.

As an approach to inquiry and learning, holism does not displace other modes of

knowing but transcends them and opens the door to a more creative engagement with change in complex systems at all levels from the micro-organic to the planetary.

4. Eco-social resilience

Resilience is the capacity of a system to absorb disruption and reorganise itself under conditions of turbulence and on-going change. Eco-social resilience must be a core organising principle for the Anthropocene transition. It establishes eco-systemic integrity as a fundamental design criterion for human technologies, economies, habitats and systems of governance.

Eco-social resilience focusses attention on the critical relationship between human systems and the eco-systems in which they are embedded and on whose vitality they ultimately depend. Within this context it values the preservation, enhancement, and ultimate unity of both social and 'natural' capital and favours distributed networked technologies with localised capability and control instead of centralised, capital intensive systems.

Humankind's alienation from Earth and our rending of its precious web of life begets modernity's spiritual malaise and the many fundamentalist reactions against it. The Anthropocene calls us to rediscover a deeper purpose in our everyday lives and work, a purpose that transcends the sterile materialism of neo-liberalism.

You can learn more about the Anthropocene Transition Project at:

www.ageoftransition.org