DOI:10.6531/JFS.201812_23(2).0001
ARTICLE
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All Revolutions Are Equal; But Some Are More Equal Than Others

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Abstract

There is a substantive body of literature that argues contemporary societies are being impacted by revolutionary conditions, although precisely what is meant by the idea of revolution varies enormously in almost every case. This article argues that it is essential foresight practitioners have an understanding of the systemic and worldview altering possibilities that many revolutions imply, and that such an understanding is then contextualized into whatever foresight praxis is being undertaken. It seeks to explore a plurality of revolutionary realities through indications of characteristics, manifestations and potential foresight impacts, while asserting that there is a nested interdependence in the variety. It also contends that the bio-physical revolution now upon us requires a completely different theoretical and ontological orientation to anything that has gone before. Finally, it suggests that if new thinking requires new forms then the practice of foresight not only requires a conceptual framing that integrates the past with the future as part of practice, but if it is to be relevant in the future conversations that matter, it may need to completely reconceive itself as a conceptual space.

Keywords: Techno-revolution, 3rd Industrial Revolution, 4th Industrial Revolution, Bio-geophysical Revolution, Hyperobjects, Pluriverse, Expanded Now, Postcapitalism.

Unravelling Towards Revolution

The central proposition of this article is that the concept of revolution, both as an idea and as the basis for design, must now be considered as distinct from its western-centric, event-based origins. It will argue that the obsession with technological revolution by neo-liberal economic advocates is an untimely distraction and impediment to consideration of deeper and far more profound social, epistemological, bio-geophysical and ontological revolutions that may, at an existential level, determine the quality of existence for future generations. These latter revolutions frame the potential of critically different futures (from a one world universe to a many worlds pluriverse) that are difficult to conceptualise if the conversation is centered in a praxis that accepts ways of knowing and doing that take as given individualism, rationalism, objectification, dualism and economism. The challenge therefore is essentially to move towards a revolution in thinking.

Ideally this should inform and stimulate social systems of all kinds on both a macro and micro scale, so they can conceptually bridge what has been with imaginings of what might be, in ways that are different from the praxis that initially created the issues we now face.

Why Revolution?

In recent times there have been a number of assertions that contemporary society must now confront a 'rupture in the fabric of history'. Sometimes contentions of this nature are framed in the language of revolution; in others as a 'great transition'; and in still others as a major discontinuity. Whatever the nomenclature, overarching narratives of disruptive change either explicitly or tacitly frame the nature of the window through which both anticipation and memory are contextualised and therefore, are worthy of more than superficial attention. This is because, as the title of this article suggests, the locus of revolution or transformation differs considerably, depending on what is being considered. Some event-based revolutions, for example, conform to Craine Brinton's *Anatomy of Revolution* as "drastic, sudden substitutions of one group in charge of a territorial political entity by another group hitherto not running the government" (Knutsen & Bailey, 1989, p. 421); whereas others that are technological in origin "can be defined as a set of radical breakthroughs, forming a major cluster of interdependent technologies; a cluster of clusters or a system of systems" (Perez, 2010, p. 189). However, these revolutions are completely disparate in their framing from those that seek to escape the ontological and design boundaries of a western-centric 'one world world'. They look to liberate a pluriverse that is significantly different in its orientation and intentionality, in that it seeks to reimagine and reconstruct multiple local, alternative worlds that are not centered in modernity (Escobar, 2018). The differences illustrated above are not merely theoretical; they impact on all 'design practices', be they conscious or not, because they intend to bring into existence particular ways of thinking. This is why the nature of the revolution, or the transformation being either postulated or unconsciously used (its framing), matters.

It is possible to completely avoid questions of revolution or grand transformation by asserting that attention to the grand narratives is problematical at best, and thus it is better to focus on the acts of transition, be they through commoning (Bollier & Helfrich, 2015), drawdown (Hawken, 2017), Transition Towns (Hopkins, 2008) or some other kind of 'springing forth'. However, this avoidance places these concepts into an unhelpful relational dualism with the larger narrative. Escobar (2018), for instance, seemingly privileges the latter when he describes the need for autonomous 'transition design' of individual and collective life projects that take as their foundational supposition a need for societies to transition to futures that are more sustainable. However, he notably prefaces the case for autonomy by postulating that we are in a transformational era, a time-space where mankind is between narratives and thus there is a requirement for humanity to rethink what it means to be human. In doing so he situates and stabilizes revolution (transformation) and transition into a symbiotic rather than an antagonistic relationship. Within this construct, the potential for understanding repatterning (changes to conceptions of time, form and space) occasioned by large scale transformations or revolutions provides the basis for a diversity of place localised (not place based) transitions, only some of which may be framed by corporations and state institutions. In this way some, but not all, revolutions 'liberate' societies from the relationship arrangements and exchange processes that currently define them, and circumscribe the larger challenges that require attention.

Given that there are now many complex and wicked problems confronting global humanity (Dator, 2014; Karatani, 2014), assertions of 'great transitions' or 'revolution' sometimes align, and at other times differ, both in nomenclature and substance. This complicates the term's considerable metonymical baggage, and any attempt to impose some kind of deterministic ordering and rationality obscures the inter-relational nature of multiple effects confounding differing

conceptions of reality. For instance, the recent assertion of an imminent 4th Industrial Revolution by Klaus Schwab (2016) is built upon a deterministic, technological premise that continues to further entrench the socio-economic ideologies upon which it relies. In contrast, the 3rd Industrial Revolution advocated by Jeremy Rifkin (2011), while also containing technological elements, is a contention of social revolution. In this latter characterisation, macro changes in energy production and use—together with similar disruptions in communication technologies—facilitate an interactive set of dynamic patterns in time, form and space that profoundly change the nature and design of both humanity's settlement patterns and its associated socio-economic fabric. As this article will suggest, clearly these two kinds of revolution are not comparable and thus, Rifkin's 3rd is not overtaken by Schwab's 4th; although the nomenclature suggests that it might be. In situations where this confusion is perpetuated, the consequence is a conceptual quicksand that quickly distorts all that is built upon it. It means that attention must be given to presumptions of (revolutionary) disjuncture and how these frame—or sometimes reframe—memory and causal patterns in ways that determine the design of intentionality and the way foresight is contextualised.

What Is Revolution?

Metonymy matters. Certain words are impregnated with memories and consequences that extend far beyond their literal meaning and the term 'revolution' is undoubtedly among them. As the Dutch philosopher Eelco Runia (2014) suggests, those words or phrases that are extended beyond litorality in themselves become metaphorical (hence metonymy) and that where this occurs, there is a recognition that the metonymy becomes an allegory of incoherence; one that explains humanity's disproportionate habit of taking itself by surprise. While the Oxford Dictionary suggests that the etymology of revolution is to 'turn around' or 'roll back' from late Latin (*revolutio*) or old French (*revolvere*), it's early usage in the Western episteme to describe an 'overturning' and a 'restoration' seems (in the main) to provide a primarily political meaning. Its early known usage seems to relate to the 1688 restoration of the House of Stuart in England; a 'Glorious Revolution'—at least in the minds of its supporters—and this was in all probability the genesis of its event based association.

However, even at the outset 'revolution' was used to describe other great turnings. For example, Alexis de Tocqueville in the *Ancien Régime* (1966), saw the French revolutionary event as a litany that was also a structural drive towards democracy; a different way of seeing the world. Later it was coopted by Karl Marx (1867) and for the better part of a century it was the concept that articulated best the aspirations of a communist East to overturn what they saw as the corruption of a capitalist democratic West. It is therefore unsurprising that as the 20th century progressed the collective understanding of the meaning of revolution became immensely value-laden and principally associated with the interpretation of specific—often Marxist inspired—historical events. Ironically, recent technological developments have seen the idea of revolution repurposed again. Now it is widely used by certain constituencies to assert the progress of a technological revolution, thereby affording significant advantage to those who embrace it in prosecuting the agenda of a vibrant, capitalist, ostensibly democratic, system. Therefore, in the historical record, there are clearly a number of interpretations that require any future-oriented conversation to unpack and understand the nature of the reality (structures, worldviews and mythologies) that the revolution in question brings into being.

There is, however, one caveat. If, as has been already argued, 'revolutions' cannot be neatly boxed or siloed—although there are some assertions (e.g. Schwab's 4th Industrial Revolution) that perversely seek to do just that—then they must be considered through the context of their inter-relationality. This suggests that, in their nature, they are folded and interrelated in almost fractal-like ways; where the patterns and consequences they create only emerge as fragments at the intersections between knowledge and ignorance of what has been, or what might be becoming.

Seen in this way, most revolutions are therefore hyperobjects (Morton, 2013), whereby it is only in their local manifestations we can experience an expression of their nature without really being sure this in any way reflects their entirety. This idea of revolutions as hyperobjects is problematic within normative conversation and framings. It necessitates practices and facilitation that can coexist with an ever-present uncertainty (Nowotny, 2015. p.112) as well as an acceptance that there are some things that can never be adequately objectified.

Manifestations

The hyperobjectivity of revolution sits in a tension with the 'revolutionary event', for the latter, with its unique connotations of time, place and subject, together with the centrality of (political) actors, became—and probably still remains—the primary unit of analysis for historians and revolution (Tilly, 1979. p.31). While the latter privileges the idea that manifestations of revolution as a 'thing' can be considered scientifically, recent studies suggest that a widening of the theory of revolution to focus upon "the conditions that sustain regimes over time…and that treat revolutionary processes and outcomes as emergent from the interplay of multiple actors" (Goldstone, 2001. p. 175), might be a more appropriate framing within which to consider both intentionality after chaos and the impacts of non-human actors. In this expanded definition manifestations may include event-based revolutions (political/economic/catastrophic), technology-centric revolutions, epistemological revolutions, social revolutions, ontological revolutions and, most recently, bio-physical revolutions.

This more nuanced and multifaceted definition suggests a complexity and ambiguity that has a number of important consequences. Firstly, it suggests that any taxonomy or typology will at best be arbitrary and incomplete. Secondly, it assumes that often one kind of revolution may act upon or contain within it other kinds of revolution as well. The English historian Hobsbawm, for example, observed: "America is a revolutionary power based on a revolutionary ideology. Like revolutionary France and Soviet Russia, America is not just a state, it is also a state dedicated to the transformation of the world in a certain manner" (Hobsbawm & Polito, 2000, p.48). Thirdly, in this 'stew of metonymical chaos, an unquestioning acceptance of any particular litany might obscure profound systemic, worldview and even mythological discontinuities. There is evidence of this in the discourse of contemporary African revolutions. In most cases, attention is directed to the removal of particular potentates in various states (event revolution). In so doing it 'removes the gaze' from the large-scale colonisation of the continent by state-sponsored economic actors whose anti-hegemonic rhetoric ostensibly belies the core intent of their revolutionary action: control over vast resources for their own non-African purpose (Taylor, 2009, p.4). In these instances, a focus on the former over the latter makes it extremely difficult to consider the transformative (extractive) structural sub texts (social, technological and epistemological revolutions) that are really at play under the guise of 'sustainable development'.

The event as revolution

In a world where the nation state has been the dominant unit of large socio-political organisation the fall from grace of particular elites and their rapid replacement with another power arrangement, together with the causal arguments for the same, is an easily understood, evident narrative that suits the penchant for empirical observation. As the philosopher Ricoeur would suggest, events are often privileged because they link us to the world of action, thus "providing stories that come from the language of doing something and the cultural typology that proceeds from the typology of plots" (Ricoeur, 1984, p.37). What is often overlooked in their unfolding however, is that those who benefit from any given revolution normally reconstitute many of the same institutions—albeit in another guise—that they themselves revolted against. In Iran for example, the Shah Mohammed Resa's hated SAVAK was quickly replaced by Khomeni's MOIS (Axworthy & Axworthy, 2008.).

One might conclude therefore that whilst causing great suffering to the victims of history and almost always taking on the appearance of structural difference, many event revolutions are often unexceptional in their long term, systemic effects. Hence, as Sorokin wryly observes: "to continue to look upon these [event revolutions] as something exceptional, abnormal, accidental and incidental to social life itself is no more scientific than to look at indispositions, sicknesses, painful experiences as incidental" (1957, p.603). Consequently, the challenge for the foresight theorist is to understand how any specific enquiry might be influenced by a particular causal revolutionary narrative beyond its superficial litany (the Arab Spring is a case in point); for it may be considerable, or it may be almost nothing at all. At issue is whether the revolution being considered really does have longer term disruptive systemic and structural possibilities, with all the speculation and uncertainty that this implies.

Technological revolution

Some kinds of revolutionary activity mark periods of relatively rapid adaptation in the human condition and these often have a technological signature. Such discontinuities can therefore be considered as a second type of revolution. They leave deeply-etched traces in the record of symbolic language [or form] and collective learning, which, as Christian observes, affords the escape from genetically constrained adaptation (Christian, 2003, p.446). Oftentimes, these symbolic markers have been associated with the discovery of new technologies that are so disruptive in their effect they rapidly colonise social and economic activity and thus, they frame the way adaptation will henceforth occur. "This is because when transformative technologies are introduced (such as the current smart phones), new assemblages develop. These can reshape the parts in ways that subvert existing systems and mythologies" (McAllum, 2016, p.5).

Our collective memory (history) has, as a consequence, often been determined, not just by the availability of particular technologies, but rather more through a disruptive application of the same (for instance the use of massed canons at Culloden in 1745). Spengler (1932) argues that this attention to application or technics underpins the processes of existence; an internal structure in the fight of life itself. It is through what it brings into being that the history of technology deeply embeds itself in all other revolutions—not in its artefact per se, but rather as a memory of usage. In this interpretation of revolutionary theory "the meaningful space in which technological change needs to be studied, therefore, is that of innovation, at the convergence of technology, the economy and the socio-institutional context" (Perez, 2009, p.186). This reorientation moves attention away from the impact of the technological 'thing' to that of intentionality (how we might best use the 'thing' or the convergences and divergences it causes). What is being asserted is that, in revolutionary conditions, it is technics that matters. This will determine, for instance, how we might collectively live with artificial intelligence technologies that have the potential to reframe life and war as we understand it. For the foresight practitioner this suggests that intention should be placed on attention to what it is the technologies enable (or disable) as a second order effect (perhaps through the use of the futures wheel method of Jerome Glenn (2009).

Epistemological revolution

From time to time transformative ideas emerge that are implicated in, yet transcend, particular events. These significant disruptions in thinking and consciousness (for example the introduction of visual perspective in painting by Da Vinci) and/or epistemological orientation (neoliberal economics) are in their nature both ephemeral, and usually massively distributed in time and space (Morton, 2013). What distinguishes these 'ideas revolutions' is that it is difficult to explain the 'different new' they suggest using the conceptions of what exists, for "using old concepts rather than allowing the new to stand out in its originality against the old background, gives rise

to misunderstandings, misinterpretations and objections"(Gebser, 1984, p.36). The most profound of these ideas seep into our praxis, our consciousness and our deepest mythologies. As they do so, we seek to own them—to give them agency—through naming them. The Tao, the (Western) Renaissance, the Bible, Newtonianism or the Gita are all examples. Their profundity lies in the way they frame the lens through which we determine what constitutes reality, and also what is rendered invisible; because invisible ideas lie beyond the patterns and experiences (consciousness) that particular epistemologies allow. Perhaps there was a time when these epistemological differences arguably had only a regional influence. However, in a globally interconnected world, privileging some ways of knowing over others without understanding the consequences creates the capacity for parts of the human family to talk past each other in ways that confine possibility and are potentially dangerous. The challenge for those exploring any set of 'futures considered possible' is thus: do they remain within the worldviews and epistemologies that frame what is now—an implicit, dominant consciousness that has become problematic—or can they find a means to bring in the uncomfortable 'other'?

Social revolution

Significant energy and communications technology revolutions reconstruct time, form and space. In some instances, these reconstructions might be described as social revolutions, when the consciousness of the manner in which time, form and space are manifested is radically altered (for instance telephony accelerated the ability to communicate to near real-time). Whilst there is evidence that such revolutions are also a litany of technological sophistication and progress (albeit of a haphazard, almost linear, fashion), it is much more difficult to argue that epistemological and cultural norms that accompany these transformative epochs happen in the same way. As a consequence, social revolution seems at once both evident, yet confounding. For instance, the application of technologies normally mark how societies became more agrarian or industrial (in various incarnations), yet they often confound, in that these same societies often reject or grossly distort the ideas that are fundamental to the success of their newly acquired social arrangements. Netarchist technologies, for instance, while seemingly distributing the benefits of social media, are completely undermining the market models that modern society as a whole rely upon (Rifkin, 2014). Faced with such contradictions, one reaction is to invoke a return to the past, 'rose coloured' perceptions of how things once were; revisions that probably bear little resemblance to those earlier realties.

When social attitudes diverge from technologies (or perhaps because of them), one can argue that a corruption of the dominant cultural ethos is underway. This is what Khaldun (Ibn, 1958) describes as the loss of *asabiya* or 'the spirit that binds'. That said, as transformative technologies become widespread, they did (and do) enable new forms of organisation and support for alternative worldviews to emerge, informed by those who first benefit from the deployment of disruptive technologies. They exist in a transformative tension with those whose influence and power was institutionalised through previous social revolutions and they force us collectively to confront ways of thinking and being that, if continued, pose existential threat. It is this tension that makes the capacity to explore futures that are 'socially revolutionary' difficult. It necessarily requires setting aside almost all the norms that seem axiomatic: growth is good; the nation state is the fundamental unit of governance; property rights are the essential unit of society.

Bio-geo-physical revolution

Whereas the revolutionary types considered thus far have essentially been human-centric, and thus play well into the agency-centric ontology that dominates our times, the sobering realisation that modernity has transformed the geo-physical and biological conditions of the planet

at an apocryphal level (Zalasiewicz et al., 2008), requires consideration of a macro-biophysical revolution that has hitherto been disregarded in revolutionary theory. While this is almost certainly a revolution of our own making, what distinguishes it is the lack of control humans have over it and the enormous spectrum of uncertainty it poses. It has ushered in a future present that is increasingly toxic for humans; one that will accelerate unless there is a profound change in the human condition. Further, because there is an urgent need to change this trajectory before the consequences become unstoppable (4°C is widely regarded as the point of no return (Lynas, 2007)), a response to this revolution is both time bound and deterministic in nature. Given that our current scientific understandings have no way of determining precisely how long it will take for the planetary systems to respond to any efforts we might collectively make, we must now confront the idea that the planet has not only seemingly stolen the control of time that humans thought was theirs, but it may have also coopted the trajectory of history as well.

If humans are to survive this unwanted revolution then they will have to disavow themselves of the narrative structures and mythologies ('Mother Earth', bountiful nature and similar) that are used to denote their centricity and ownership over everything the planet contains. Instead, what is required is an alternative that integrates us with all that surrounds us in an interdependent manner. Some argue that this shift is so profound they liken it to learning to die; to be willing and able to let go of all that we know and have (Scranton, 2015, p.28). In other words, this is a revolution that will require a rethinking of what it means to be human.

> *It means that all of our structures of awareness that form our present consciousness structure will have to be integrated into a new and more intensive form which could in fact unlock a new reality (Gebser, 1984, p.4).*

What makes this revolution different is that it requires an explicit choice, for the consequences of not doing so are existential in nature. It also requires eschewing the penchant to solve multiple issues through the application of ever-increasing technological complexity. In other words, this revolution frames how humans need to invest in other revolutions. This is not as easy as it seems, for as Tainter (2011) points out:

> *[More] commonly complexity [in human history] increases in response to problems. Complexity emerging through problem solving typically precedes the availability of energy and compels increases in its production. Complexity is not something we can ordinarily choose to forgo (p.96).*

There is no roadmap for what needs to be done, nor how we think about what needs to be done, except that we know that we need to think differently and to design differently what needs to now be brought into being.

Ontological revolution

Faced with the enormity of the required bio-geo-physical revolution, we may perhaps find that the only escape (or necessary adjustments) possible needs to emerge in future conversations that move outside present norms. These will necessarily move past ontology (the ways we think about what we believe we are or what we think is real) and design (the way we bring thinking into being) that are instrumental in maintaining unsustainable edifices that underpin the contemporaneous world (Escobar, 2018). If this premise is accepted (and the existential consequences of the Anthropocentric problems that confront us suggest that it should be), then the making of other worlds (both macro and micro)—a pluriverse not a universe—is necessary. This requires the exploration of ontologies and design that do not privilege individualism, objectification, dualism and economism as unquestioned ways of being. It requires the reimagination of the global north and its great cities

that for the most part are "gestural egocentric statements and master planning fictions [that] when measured against the imperative are not merely misplaced, they are crimes against the future" (Fry, 2015, p.48). As Escobar (2015) opines, it will necessitate the rethinking of futures for those who have thus far benefited that are growth agnostic, biased towards quality of life not quantity of life, and that are freed from the tyranny of dualisms that currently confine debate. At the same time, those in the global south might be better served making many worlds that are not determined by 'development' agendas (post development), the imposition of westernised political 'ideals' that are non-liberal in practice, or artifices that are created to extract wealth from economically colonized territories (post extractist). Its conceptual challenges, ecological design implications and the emphasis of inter-relationality has the effect of destabilising the epistemological certainty that we have become accustomed to. For some this will seem all too difficult and they will no doubt retreat into seemingly safe harbours, while others will explore with imagination, anticipation and aspiration the possibilities that future generations expect us to seek.

Table 1. *Describing some forms of revolution, characteristics, manifestations and implications*

Descriptor	Unit of Analysis	Characteristics	Manifestations (sample only)	Implications for Foresight
Event	Political Economy Catastrophe.	Sudden overthrow of established regime and institutions/chaos/ replacement.	French Revolution; Russian Revolution; Syrian War (triggered by drought).	Understanding is predicated on observable causal plots and their consequences.
Technological	Technological evolution and the development of how they are used (technics).	Discontinuous technology changes the nature of symbolic language and learning.	Mastery of the gun in Europe; Printing; The Internet; AI and nanotechnology.	Understanding the process of how technologies are used (technics) as a first order enquiry; and the potential of the same to reframe systems and structures.
Epistemological	Reframes understanding of form, and space, and consciousness.	Important ideas/ discoveries reframe knowledge systems and cultural artefacts that in turn determine what is reality.	Western Renaissance (a celebration of perspective); Scientific/ Newtonian revolution (reductive rationalism); Neoliberal economics.	Particular narratives (orthodoxies) dominate while obscuring others. New ideas are misunderstood if they are explained in old concepts.

Social	Arrangement or evolution of socio-economic structures as systems, that are know as civilizations, or as cultures.	Changes settlement and organization patterns. Changes cultural norms and resource complexity.	Agricultural revolution; Industrial revolution or revolutions (1st /2nd /3rd).	All aspects of human activity are substantially changed by revolution with concomitant worldviews (e.g. mechanism), and mythologies (e.g. 'growth is good').
Bio-physical	Epochs of geo-physical and ecosystem conditions of the planet	Changes the systems that sustain renewable resources and both the type and nature of flora and fauna.	Shift from the Holocene to the Anthropocene.	Requires a recalibration of how humans exist on the planet and thus the ongoing (but less complex) viability of all existing human and non-human systems.
Ontological	The making of plural (pluriversal) rather than single (universal) worlds.	Creating and making ways of being and living (buen vivir) that are not centered on individualism, objectification, dualism, capitalism or economism.	For the North: post growth, post capitalist, post dualist. For the South: post development, post-liberal, post extractive.	Focus on the great transition and the design of autonomous 'community' worlds that can coexist with that transition.

Revolution and the Future

What is being posited is that not all revolutions are equal, and while the term has been often used to describe disruption inside the prevailing world view, in other instances it has been used to describe paradigm shifts that realign our senses of time, form and space and thus, the world view itself. The implications for futures-focused praxis are therefore several. Firstly, those revolutions that alter deeper senses of reality need to be considered within a context that integrates perspectives of the past with views of the future (Hames, 2007). Secondly, the process of understanding potential alternative realities necessitates the ability to engage with modes of understanding beyond just the empirical and the analytical, whilst facilitating exploration of alternative constructions through processes such as causal layered analysis (Milojević & Inayatullah, 2015). Thirdly, if an exploration of futures within the contemporary context is either intentionally or unintentionally blind to the revolutionary conditions in which 21st humanity is currently situated, it is complicit in sustaining a particular view of 'normality'(Henderson, 1996). In other words, it is the exploration of futures without a future. Fourthly, if it is in the nature of revolution to reframe shared understandings of time, form and space, and many of the processes that humans use to learn and adapt (McAllum, 2016, pp.257-259), attention needs to be given to how assemblages of these reconstitutions act and interact with each other. This requires that less attention be given to the 'objects' that are normally

central (De Landa, 2006), that the tradition of disciplines be transcended (transdisciplinary), and the *less* complex (in terms of problem solving that conscripts resources) be privileged over the *more* complex. Finally, in coming to terms with the biophysical revolution in which we are immersed, a normative state of ever-present uncertainty is to be expected as part of a post normal condition (Sardar, 2015). The capacity to navigate this largely unknown (and for some unwanted) landscape of future possibilities requires an aperspectival consciousness (Gebser, 1984) that includes the reimaging of the Western epistemology as the epistemology of the north (Santos, 2013), and the complete redesign of the socio-economic systems that are most collectively heavily invested in (Raworth, 2017).

As Bussey recently asserted, this kind of new thinking requires new forms (Bussey, 2017, p.295). It suggests that in a burgeoning renaissance of transdisciplinary exploration, the practice of futures needs to obsess less about tools and explore more about how narratives can be created, where both futures and the past are woven into a macrohistorically framed consciousness, as exemplified by an adaptation of the 'Expanded Now' model below.

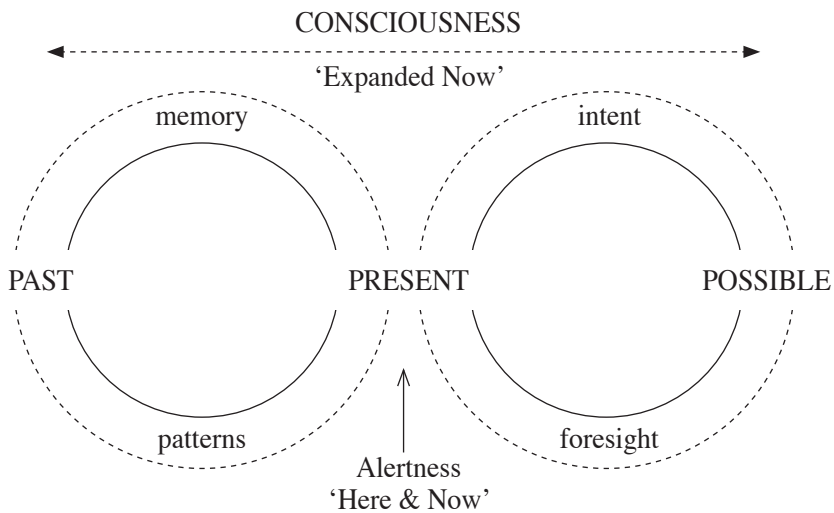

Figure 1. Depicting the Expanded Now (Adapted from Hames, 2007, p.228)

It is also useful to note that the revolutionary consequences inherent in the contemporary condition are increasingly central to the writings of many actors who do not see themselves as futurists. Appadurai (2013), for example, argues that anthropology as practiced since the mid 20th century has failed in its task and needs to be completely rethought from a transdisciplinary basis. Similarly, Rosa has argued in similar fashion for sociology: "when it is profound and consistent sociology is not satisfied with a kind of mere observation that could be deemed deterministic, pessimistic or demoralizing" (Rosa & Trejo-Mathys, 2013, p.322). Raworth (2017), Das (2016) and Streeck (2016) have done the same within economics, although from very different perspectives; Nowotny (2015) and Giri (2017) the same in science, while all the while speculations on possible futures are contained within the prognostications of numerous technological pundits (Brynjolfsson & McAfee, 2014; Srnicek & Williams, 2015; Tegmark, 2017). One might argue, therefore, that the business of the future no longer has a 'futurist' locus (if it ever did), and if futurists are to add value to the conversations they instigate or mediate they need to bring framings and ways of understanding to those that are not normally accessible to others. I would argue that the appropriate contextualising of 'revolution' might be one such contribution.

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