

Chapter 3

GLOBAL GOVERNANCE AND THE NEW METANARRATIVE

Metanarrative and governance are closely related but not identical concepts. I have described the former as the command-and-control function of modern human society which informs the choices we make and the aspirations we share. Socially constructed beliefs and values contribute to our sense of meaning and purpose, and thereby to the development trajectory we choose to authorize, and more broadly to the character of the human/nature complex we inhabit, which is to say, the kind of relationship we have with our terrestrial home. Governance, on the other hand, includes both a practical and an ideational component and the one is often mistakenly conflated with the other. Metanarrative refers to the latter. The practical component of governance is that array of rules, practices, methods and tools which operationalize and implement the precepts stipulated by the metanarrative, that is, by the collective intentions and ethical propensities inherent to the ideational component of the system of governance. Given a certain sense of urgency regarding the instability of our relationship with Earth and the apparent need to chart a new path forward to long-run planetary sustainability, it's appropriate now to re-evaluate, and reformulate as necessary, the social constructions that guide our practical and political behavior.

This approach to better governance is intended to contextualize and catalyze the myriad hands-on activities aimed at securing the long-run material sustainability of the human/nature complex such as moving to a low-carbon energy regime, building resilient communities, alleviating poverty and so forth. These projects are ongoing and clearly necessary but they're also slow-moving, standing in sharp contrast to repeated (and increasingly strident) calls for radical, transformative change in our relationship with Earth, and in the direction of our forward motion. The proposition on offer here is that this radical change, tantamount to securing the safety and the future of human life on Earth, will arise in large measure from a revitalized conception of global governance with a fresh focus on its ideational component. This shift in focus from the material to the ideational, from the physical to the metaphysical, does not diminish the need for effective government but it does move to the forefront the broader objective of understanding more clearly the existential implications of our current situation.

Positions adopted regarding these implications (whether thoughtful or dismissive) give meaning to the human condition, and underlie all modern modalities of governance.

Global Governance

Notwithstanding the territoriality of sovereign states and other claims to private property, Earth's biosphere is a public space. Its protection is a public and therefore a political responsibility. Managing the relationship between people and planet is the centrepiece of that responsibility and, from a whole-Earth point of view, the defining challenge of global governance. The term 'governance,' however, enjoys no concise and common definition, and the same is certainly true for the larger and more comprehensive concept of 'global governance.' In fact, as a first approximation, if governance were defined straightforwardly as the service that government delivers, then absent a world government global governance would not exist at all. And yet, a broad and diverse literature attests to its theoretical existence, and the relatively high degree of order which permeates and stabilizes world affairs speaks to its empirical presence as well. Even a brief overview, however, of the professional literature pertaining to global governance would take us too far afield, so for present purposes – that is, for a discussion about the relationship between people and planet – it will be easier to talk about what global governance does, as opposed to what it is. Here the field is simplified dramatically.

Global governance, regardless of how it may be constituted, can be thought of as serving two key functions. The first of these is the provision of public order for the public good in the international arena. Business and finance, trade and transportation, health and safety, human rights, the environment, arms control and cyber-security are just a few global issue areas which are regulated, managed or otherwise overseen by regimes intent on providing necessary services and administrative predictability for all those affected. The second function of global governance, and the one central to this book, is to provide a generalized steering capability for human society. Notwithstanding its many interpretations, the verb 'to govern' is originally drawn from the Greek *kubernān* and the Latin *gubernāre*, both meaning 'to steer.' Steering implies two things: plotting a safe course through the obstacles of everyday life and, equally or perhaps even more importantly, moving steadily toward a chosen destination.

Where are we going?

Good governance is intentional. To the extent that world affairs are guided by systems of governance, they are shaped fundamentally by a collective sense of what purposes should be pursued, and what kinds of values should prevail. Global governance, in other words, provides order for a reason, namely, to achieve an agreed objective. An agreed objective will necessarily conform with a given set of values (one objective is, by some standard of valuation, better than another) so the purposeful nature of governance unavoidably includes a normative dimension. “Norms are at the heart of all governance structures,” as one analyst has succinctly expressed this important point.¹

Prosperity defines our preferred objective and progress identifies the means to attain it, but our rapid forward motion to a better future, though well-meaning, has been problematic. Human behaviour relative to Earth’s ecosphere and resource base is demonstrably (and exponentially) rapacious. Population growth and rampant poverty still run far ahead of material well-being and many thousands of our fellow species on Earth have already been lost, their habitat destroyed. These unintended consequences are disturbing and counterproductive, calling to question the propriety of the pursuit of progress and prosperity. Though emblematic of modern global governance, this programme for human advancement is evidently not taking us where we need to go.

Any new metanarrative about planetary sustainability must emerge from an expansive context, one which in fact encompasses the whole Earth. Today that context is the Anthropocene epoch, the self-proclaimed apex of our hegemony on Earth and in fact a new geological interval which intimately fuses two major components – Earth itself and the human population which thrives upon it. But how are we to make sense of the onset of the Anthropocene, and what kind of story does it tell? Are we masters of our own fate, headed to a secure and productive relationship with the planet, or are we a rogue species rushing mindlessly toward eco-catastrophe? The human capacity for foresight and agency in combination with the logic of self- and system-preservation suggest a hopeful future. Physical and ecological evidence to date supports a less sanguine

¹ Steven Bernstein, *The Compromise of Liberal Environmentalism*, New York: Columbia University Press, 2001, p.5.

conclusion. Which of these points of view is closer to the truth? Do we shape our future by considered choice or have we been victimized by an innate propensity to exploit, maximize and manipulate regardless of the consequences?

A heuristic device is available to help assess these two very different perspectives.² The device distinguishes between *explaining* the Anthropocene from an outside or objective point of view, and *understanding* it from an inside or subjective one. The former captures the biophysical (genetic, ecological) factors which contribute to the evolution of the relationship between people and planet. The latter captures the socio-cultural factors (choice, intention) which inform and guide that process. Together they suggest two kinds of story about the direction of our forward motion.

Explaining the Anthropocene

The outside or objective point of view sees humanity – the set of all human beings – in much the same way as an ecologist would see any other species living on Earth. Ecologists study observable behaviour only, making testable inferences that explain the patterns they see. No allowance is made for intention or meaning. Ecology is a thoroughly empirical science. On this view, the ascent of the human population has followed a predictable, exponential trajectory.

Any and all species will proliferate within the bounds of their respective niches. Niche boundary conditions are defined in terms of external and internal constraints. External constraints are imposed by geography, climate, food and water supply, competition, predation and so on. Internal constraints are determined, essentially, by the genetic complexity and morphology of the species in question. Neither of those limits is problematic for us. We possess a unique and very powerful set of adaptive capabilities, and a sophisticated intelligence which obliterates boundaries. We can live anywhere, eat anything, take whatever we want. Our rise to the top of the world is, from an ecological point of view, not at all surprising; in fact, it's entirely predictable. We're a super-species, and that's the natural cause of our domination of the planetary landscape. Simply put, we grow and flourish as a species because we can.

² For more on this, see Martin Hollis and Steve Smith, *Explaining and Understanding International Relations*, Oxford: Clarendon, 1990.

A surging population, the appropriation of habitat and the extirpation of other lifeforms, the despoliation of land and water, even the massive disruption of planetary operating systems are, however, the unhappy consequences of our exceptional endowments. Explaining the onset of the Anthropocene from the outside point of view conjures an unflattering image of an invasive species overwhelming local ecosystems and food supplies, radically altering the landscape, collapsing affected populations and, ultimately, debilitating the invader too. It exposes a dynamic trajectory driven by natural forces which operate beneath the threshold of perception but which are nonetheless deeply embedded in the patterns of life on Earth. It suggests that we are being led by a biological imperative, not considered purpose.

Understanding the Anthropocene

In contrast to the outside/explanatory mode, the inside point of view makes full allowance for socially constructed features of human society on Earth such as rules of behaviour, intention and meaning. Here we seek not to explain objectively, but to understand implicitly. Instead of looking for causes of behaviour, we look for reasons. On this view, the human enterprise is a malleable social project amenable to effective management on the basis of choice.

The subjective point of view brings internal psychological and socio-cultural factors into view, the qualities that define us as creatures fully capable of constructing our own social-ecological relations. This approach suggests that natural impulses can be overridden, purposely managed in the interests of survival and for the benefit of the full realization of our potential as a transcendent species. It suggests that the Anthropocene epoch might open exciting new opportunities for us to rewrite the story of the evolution of human society on Earth.³ It suggests that collective human agency should, can and will restrain and redirect our exuberant but heretofore destructive propensity to flourish, emphatically exposed by the outside perspective.

An ethic of sufficiency internalized by each of us is a necessary component of sustainability but, though an important part of the lifestyle of scattered individuals and communities around the world, no such ethic can be attributed to human society as a whole. In fact, the opposite is true.

³ Ecomodernists certainly think so. For proponents of this view, the Anthropocene is not a crisis but the beginning of a great new era of human-directed advancement and agency. See <http://www.ecomodernism.org/manifesto>.

Instead of reining in expansionism, human agency today is fully aligned with and adds tremendous impetus to this atavistic impulse. The outside view stipulates that we grow and flourish as a species because we can. Now, another dynamic comes into play, this time from inside human society: We grow and flourish because we want to.

This is evident in the purposeful pursuit of material prosperity. The manifestation of a uniform belief system shared right around the world, this quest stipulates that growth and abundance serve important social ends. Different states and cultures may operationalize it differently, but in our collective political and economic lives nothing commands our sustained allegiance like the pursuit of growth, progress and prosperity. While the natural (external) dynamic aggressively drives the assimilation of habitat and resources, the social (internal) dynamic adds desirability and legitimacy to the process of relentless expansionism. These two motive forces are congruent and mutually reinforcing. They work in tandem, they're both deeply implicated in the onset of the Anthropocene; and together they make clear why a new direction informed by a better metanarrative has become essential.

The New Metanarrative

A metanarrative isn't immutable truth, or a rulebook. It's not a bucolic fantasy, a cautionary tale, an epic myth or a sacred text – although in time it may be all of those things. Fundamentally it's a discourse, it's the tacit conversation we have among ourselves about ourselves, about our place on Earth and in the larger cosmos. Tangibly, it's the suite of beliefs, values, collective intentions and ethical propensities which emerge from that conversation, providing a pattern, direction and an interpretation of events and practices that give meaning to the human experience.

Deeply embedded and almost invisible, a socially constructed metanarrative mirrors the shared consciousness of humanity. It's our public mindscape, intrinsic to and a reflection of human society as a whole. Today, socio-political and economic macro-management of the developmental trajectory of human society on Earth is informed by the story of Progress and Prosperity. 'Prosperity for all' is the desirable end we seek, and progress driven by growth is the means to achieve that end. It's an alluring and generous story which has taken us to the very pinnacle of success – and also to the edge of calamity, foreshadowing a turbulent climate, pervasive social-ecological disorder, even an existential shock to modern industrial society.

Can the evolution of a metanarrative be influenced by individual choice and purpose? Yes, absolutely. As with any conversation, its mood, content and direction can change when new or contrary ideas are interjected and engaged. Given the pervasiveness and deep roots of the incumbent metanarrative these engagements will inevitably be disruptive and jarring but, when ideas clash, when stories collide, the result is a new amalgam of beliefs and values, and a new direction forward. The shared process of creating a new metanarrative will be uniquely challenging – historically, intellectually, morally – but, by equal measure, profoundly stimulating as it calls to question the deepest meaning of our species’ tenure on Earth.

Green Shoots

The green shoots of new stories are already abundant,⁴ springing up around the world. But none, individually or collectively, has seriously challenged the existing story of Progress and Prosperity, or subsumed it. The new global narrative hasn’t been written yet.

David Korten has offered one impression of what it might look like. Here’s what he says:

Whether specific details of our chosen story are right or wrong is less important than whether its overarching narrative awakens us spiritually; inspires cooperative, mutually beneficial relationships; supports a way of living that recognizes the wonder, beauty, goodness, ultimate meaning and value of life; and puts us on a path to a viable future. Most important at this moment in the human experience is that our chosen story calls us to accept adult responsibility for the consequences of our choices for ourselves, one another, and a living Earth.⁵

This is a good start, and heartfelt no doubt. Most green shoot stories rising around the world share similar sentiments. They offer clear, ethically informed visions of the future and prescribe

⁴ See, for example: <https://www.newstories.org>. Also <https://www.findhorn.org/programmes/living-the-new-story/>

⁵ David Korten, *Religion, Science, Spirit: A Sacred Story of our Time*, Yes! Magazine, January 17, 2013. Available at: <http://www.yesmagazine.org/happiness/religion-science-and-spirit-a-sacred-story-for-our-time>

new collective projects or development models for the world. They're all suffused with hopeful expectations, with an optimistic outlook, and with calls for responsible change.

But the new global narrative won't be a simple story portending happy endings, nor will it promise an easy transition to planetary sustainability. If that were the case, then the multitude of such stories now in circulation would surely have taken us further down the road toward the goal of stabilizing the still-precarious relationship between people and planet. To realize and embrace the sentiments named by Korten is clearly necessary, but it's by no means sufficient. The new story, traveling beyond those sentiments, may very well be darker, tougher, evoking deeper and more vivid currents of thought and feeling. Sketching a new way forward to a hopeful future will begin by confronting directly the hard truth that we are a species in existential peril.

Some Practical Considerations

The new global narrative is still incubating and it's not clear yet how its distinctive, radically transformative features will emerge or be expressed. In the meantime there are a number of ways to imagine the contours of the narrative which give it a general shape. For example, the narrative may afford an opportunity to examine manageable sub-components of transformative change independently.

I *Disaggregating Transformative Change*

Thomas Homer-Dixon⁶ has offered a useful parsing of change into four sub-categories, each of which directs our attention to specific themes which might be embedded in the new story:

- a. *Cognitive transition*: This entails a shift in dominant worldviews from Newtonian mechanics to complex adaptive systems. Newtonian mechanics inform the Machine Age, but planetary operating systems, ecosystems, human society and the global economy are

⁶ Thomas Homer-Dixon, *The Great Transformation: Climate Change as Cultural Change*. Conference presentation, Essen, Germany, June 8, 2009. Available at: <http://www.homerdixon.com/2009/06/08/the-great-transformation-climate-change-as-cultural-change/>

all complex adaptive systems. Different causal forces are at play and new phenomena, such as non-linearity, resilience and emergence become salient.

- b. *Economic transition*: This entails a shift of the global economy from the growth model to the steady-state model. In the former, the environment is a sub-set of the economy. In the latter, this is reversed: the economy is a sub-set of the environment.
- c. *Political transition*: This entails a move toward a more muscular, informed and engaged civil society which can successfully hold political leadership to account. Modern communication technologies can be harnessed for this purpose.
- d. *Normative transition*: This entails less emphasis on utilitarian ethics and moral relativism, and more on existential issues and spiritual values, prompting deeper reflections on metaphysical questions.

These component parts of transformative change clearly indicate the multidimensional nature of the sustainability challenge, and the layered look of the new story.

II *Three Circles*

In 1987 the UN published *Our Common Future*, also known as the Brundtland Report.⁷ This Report brought the phrase ‘sustainable development’ into mainstream culture, presenting a vision of a sustainable world resting on three equally stout pillars—environmental protection, economic growth and social equity. It was tremendously valuable as a conversation-starter but now it’s dated and in some important ways, wrong. A better approach to the new story starts from the premise that these sectors are not equal partners; that transformative change will restructure the interactive relationships between economy, society and the environment. A corrected image of sustainable development changes the three pillars into three nested circles: economy *within* society *within* environment.

⁷ World Commission on Environment and Development, *Our Common Future*, Oxford: Oxford University Press, 1987.

Sustainable development was, in its original formulation, a compromise. ‘Sustainable’ was directed at the global North, intended to constrain excessive consumption and pollution, while ‘development’ was a stand-in for economic growth, a concession to and tacit permission for the global South to industrialize quickly in order to redress North-South economic disparities. It was the prototypical example of an environment vs. economy compromise but, despite economy and environment being ingenuously portrayed as equally important, it’s now abundantly clear that when pressure mounts the real power of economic stakeholders is bared and environmental concerns are quickly sidelined. This is obviously counter-productive with respect to the admirable objective of protecting the needs of future generations. Apparently, neither equality nor an ‘economy-first’ relationship will suffice.

Notwithstanding the evident power of economic forces, recall that economic relations are the invention of, are embedded within and are (or should be) fully accountable to the community which constructed them for the specific purpose of providing affordable goods and services to people. Economy and society are not equal partners. The economy is a tool, a means to an end. Managerial oversight is required to ensure that economic activity does not compromise the environmental infrastructure on which society depends for its sustenance and longevity.

Environmental protection is clearly a social responsibility. It is not, however, a responsibility defined in strictly anthropocentric or instrumental terms. The environment is not a means to an end; it’s not just a source or a sink. Nor are society and ‘the environment’ equal partners, each serving the other. We now know that society – here meaning the human population in its entirety – is embedded within and wholly dependent upon the natural Earth. Humanity is an evolutionary product of the environment, not its maker or its master. Relations between social and environmental circles are complex and interactive, but they are not in fact equal; they’re hierarchical.

The three-circles imagery is more than a structural depiction of relationships which would obtain in the wake of transformative change. It also speaks to basic functions which each of these components would undertake. The inner circle (the world economy) will still be charged with delivering affordable goods and services to people everywhere by efficiently allocating resources and nurturing innovation even as it eschews physical enlargement (quantitative growth) beyond

the capacity of Earth to support it. The middle circle (human society) will set operational parameters for the world economy which prevent economic activity from overrunning the biosphere, and socio-political oversight will mitigate extremes of wealth and poverty. The outer circle (the bio-geosphere) places limits on the maximum size of the human population on Earth, and on the total amount of energy and material that can be diverted for economic purposes. Population size and per capita resource consumption may vary according to changeable definitions of sufficiency or the good life, but in general limits imposed by a finite planet will constrain the number of people who can enjoy a reasonable standard of living during any given period of human history. The new global narrative will undoubtedly allude to if not directly incorporate imagery as described above, and it will reflect a new and more relevant definition of sustainable development.

III *Rules of the Road*

In order to establish a clear sense of direction, the new global narrative will delineate the immutable survival conditions which must obtain under post-transition circumstances, expressed as rules which follow directly from the section above. These rules are already well-known, at least to ecological economists. They form the bedrock conditions of a steady-state world economy. They're axiomatic and require no further elaboration here; in some fashion they will be indispensable to the new story.

- a. The use/consumption of renewable resources will not exceed the ecosphere's regenerative capacity.
- b. The use/consumption of non-renewable resources will not exceed the rate at which substitutes (where possible) can be developed.
- c. Waste generated by human society will not exceed Earth's assimilative capacity.
- d. The human population on Earth will be (more or less) stable.
- e. The built environment will be durable.

- f. Our population and built environment will be maintained by a minimal level of (low entropy) energy/material throughput, consistent with a good standard of living for everyone.

All of these points are informed by the question of scale, which is to say: how big exactly can the human presence on Earth be without compromising our own well-being or damaging the planetary ecosphere? The exact parameters of optimal scale are in fact unknown at present, but Daly and Cobb make clear that a precise predetermination of them isn't necessary. We need only bear in mind that a steady-state economy, however large, should be sustainable in perpetuity at levels of per capita resource use that permit a good life for all. Knowing this,

Our first goal therefore should be to stabilize at existing or nearby levels as soon as we reasonably can. Once we have learned to be stable at some level, then we can worry about moving to the optimal level ... If we do not know how to be stable, then identification of an optimal scale will only allow us to recognize and wave goodbye to it as we grow beyond it ... Those who argue that there is no point in talking about stability unless you can first specify the optimal scale ... have got it backwards. *Unless we are willing and able to be stable, there is no point in knowing the optimum.*⁸

IV *Complex Adaptive Systems*

In the sub-section above labeled 'Disaggregating Change' I mentioned that the move to planetary sustainability comprises a number of interrelated transformations, not least of which is a shift in dominant worldviews from Newtonian mechanics to complex adaptive systems. Newtonian mechanics inform the Machine Age but planetary operating systems, natural ecosystems, the global economy and human society at large are not machines. They are complex adaptive systems in which different causal forces are at play and new phenomena such as resilience, non-linearity and emergence become salient. A successful transition to sustainability will require the competent management of these forces and phenomena, a task for which a new analytical framework will be indispensable.

⁸ Herman E. Daly and John B. Cobb, *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, 2nd edition, Boston, MA: Beacon Press, 1994, pp.241-242. Italics added.

The largest complex adaptive system (CAS) on Earth is composed of two parts, namely the atmosphere-plus-world-ocean. The atmosphere weighs 5 quadrillion tons and occupies some 50 trillion cubic kilometres. The world ocean adds another 1.5 billion cubic kilometres of volume, and 10 quintillion tons of weight. The two parts of this unitary system are dynamically coupled, exerting huge forces on each other. Trillions of tons of water are exchanged between them every day. Powered by heat from the Sun this massive, moving system is the engine of Earth's climate.⁹

The next largest CAS on Earth also has two major components. The first part is the planetary ecosphere; the second is the population of human beings embedded within it. Together they make up what we now call the social-ecological system. Like the atmosphere-ocean complex, the two parts of this CAS are deeply interactive, giving rise to a bewildering array of changes large and small, some instant, some glacial. The human population, growing at some 70 million people each year, is changing Earth's physical landscape massively and permanently, altering ecosystems and disturbing the lives and livelihoods of other species. In turn the planet changes our behaviour as we adapt to land, air and waterways altered by human intervention. The combined entity of people and planet – that is, the planetary social-ecological system – is enormous and dynamic, constantly adapting, moving and evolving.

The major source of uncertainty in the relationship between people and planet in the past was the changeability of nature but today, because of growing stresses imposed on Earth's operating systems by human activity, the dominating cause of unpredictability is the macro-behaviour of the human species. We're changing the composition of the atmosphere and ocean with little comprehension of the consequences. Fresh water systems, soils, forest cover, species habitat and much more are all vulnerable to roughshod human intervention. Given this new source of unpredictability it follows that human activity – the disruptive element in this relationship – should be constrained. Managing the relationship between people and planet, and consequently the evolution of the planetary social-ecological system, is tantamount to managing human behaviour. Newton's laws tell us nothing about how to accomplish this, but a better understanding of complex adaptive systems may be helpful.

⁹ The sheer bulk, energy and sensitivity to change of the atmosphere/ocean complex make it exceptionally dangerous if carelessly prodded.

Complexity is a rich source of innovation, and it's also a source of stability. Diversity among its parts, distributed capabilities among its component sub-systems, and redundancy to protect against failure all combine to make CAS highly resilient to disturbance. Too much complexity, however, can cause vulnerability. If connectivity is too dense, if component parts are too tightly coupled, if a breakdown here spontaneously creates a breakdown there, then overall system resilience decreases. The ability to adapt becomes brittle instead of flexible, and surprising changes in behaviour can be shocking and damaging instead of useful.

Arguably, the tightly-coupled connectivity so characteristic of modernity – in our financial markets, in our food production and delivery systems, in our transportation and communications networks, in our electrical power grids, and much more – has made society too complex. All these sub-systems serve us well, but they seem poised on a knife-edge, vulnerable to catastrophic failure. The management lesson from CAS theory is that the resilience of modern industrial society, that is, the capacity to survive disturbances, should be improved.

This means decentralizing the dense nodes which control these sub-systems, distributing capabilities across a richer and more varied socio-industrial landscape. It means easing our locked-in dependence on far away suppliers of goods and services, and on irreplaceable technologies understood only by an elite few. Increasing resilience means, to a large extent, increasing self sufficiency and autonomy.

In terms of social organization, the need for resilience calls us to envisage the democratic empowerment of local communities in order to increase diversity, redundancy and novelty, to gain greater control over basic services vital to our lives, and to reduce our ecological footprint. This devolution to local empowerment is both necessary and important, but it misses a significant point. Local autonomy is direct and practical but, if the move to planetary sustainability is to succeed there must be some degree of cooperation and coherence among these communities, and some overall sense of direction for their collective evolution as well.

Recognizing the human population on Earth as a complex adaptive system interacting with its material environment leads to a new emphasis on decentralization, but by the same token it amplifies the need for supranational coordination. It is a central contention of this book that the

purpose and directionality of that coordination is profoundly influenced by the collective ideational experience of human society at large.

Content: The Quest for Meaning

Green shoot stories typically share a number of key concepts which are thought to be necessary for the fruition of sustainable development on a planetary scale. A short list would include such things as holism, interdependence, stewardship and equity. The list could easily be extended to dozens of related concepts, from a personalized ethic of sufficiency all the way to a new theoretical framing of global social-ecological processes as complex adaptive systems. I suggested earlier in this chapter that these sentiments and principles are important and necessary, but they haven't taken us very far down the road to sustainability.

A subordinate theme throughout these incipient stories is an emphasis (to greater or lesser degree) on semiotics, the 'making of meaning.' On this account we as a species have lost touch with what's important – important for the physical continuity of ourselves and civilizations through time, for the healthy vitality of our spiritual being, and for Earth itself. This quest for meaning may be the most important dimension of the new story. After all, when confronted with an existential threat, as we certainly are today, one becomes predisposed to contemplate the meaning of life before it is ended. This is the ultimate question with which the global narrative must grapple: What are we doing here? What, if anything, are we trying to accomplish? And, vexingly, why have we allowed ourselves to take ourselves, and countless other species, to the very brink of planetary eco-catastrophe? Prompted by these questions, the new metanarrative may decisively shift the analytical terrain from 'how' questions – how can we achieve sustainability – to 'why' questions which probe more deeply into the metaphysical dimensions of life on Earth. We will no doubt continue to work in the trenches for concrete change, but the perplexing nature and ultimate importance of metaphysical issues affirm once again that the battle for planetary sustainability, and for the survival of our species, will be won or lost in the ideational domain, where stories rule.

Many good people agree that a transformative move to planetary sustainability is still possible. They declare that the world is in trouble but sustainability is within reach if urgent and concerted

international action is taken immediately. They wait hopefully for an effective pre-emptive response from political leaders. But policy makers around the world have been unmoved by calls for radical change. Instead they've been marshalling their collective will in pursuit of objectives defined for them by the dominant story of our time. By all means available, they wilfully pursue the business of progress and prosperity. This won't change, nor will a calamitous result be avoided, until that story is subsumed within a larger, better and morally enlightened context. Until the new global metanarrative gains clarity, cogency, legitimacy and popularity, the old story will continue to dominate our mindscape, leading us quickly down the wrong path.

The Moral Turn: What's at Stake

Growing public concern hints at the worry that what we've done to the planet may not only be negligent and misguided, but wrong. If that's true, any self-induced, life-damaging eco-catastrophe (such as runaway climate change) would constitute an explicitly immoral outcome of human behaviour. And because immoral outcomes are necessarily preceded by immoral causes, this supposition implies that an accurate diagnosis of anthropogenic planetary ecological instability should originate from the critical scrutiny of our current behaviour from a normative point of view, and with a particular focus on the metanarrative which legitimizes it.

Societies around the world have long been sullied by morally dubious behaviour. War, greed, radical economic disparities and distributional injustice, patriarchy and the oppression of women, child exploitation, cultural persecution and genocide, among many other examples, are all deeply disturbing concerns. That we can perceive the immorality of these behaviours – that we recognize them as aberrations – indicates that we have access to a variety of frames of reference which anchor our sense of value, and with regard to which we can make moral judgements. Applying such judgements to real-world conflicts sets up the inevitable tension between right and wrong behaviour, between what is and what should be. This tension is a constant feature of the human condition, driving moral discourse since time immemorial.

Recurring ethical quandaries test our mettle, keeping us alert and morally engaged, and in that sense they're beneficial. But some quandaries extend beyond the inconvenient, unfair or tragic to the existentially lethal – and that's what takes today's moral discourse to a new level. Two such

examples are particularly egregious: the destruction of other species and their habitat; and the foreclosure of our own future.

We depend for our lives on flora and fauna, just as they depend on each other. To diminish biodiversity is to diminish the life chances of all. But more to the point, when we humans arbitrarily terminate other lifeforms which have struggled to survive and adapt over millions of years, we arrogate to ourselves undeserved power. Mature exercise of that power might include the final elimination of, for example, the Covid virus, but no such maturity is visible in the wake of the Sixth Great Extinction, now underway, of which we are the thoughtless perpetrators.¹⁰ This destructive behaviour insults life, weakens Earth's vitality, erodes sustainability, and is emphatically unconscionable.

But our anthropocentric zeitgeist and inflated sense of exceptionalism render the planet-wide loss of biodiversity almost invisible. These features also blind us to the possibility of our own self-destruction instigated by a ruinous, cascading eco-catastrophe. Such an event would nullify any concept of sustainability. It would entail the end of human possibilities, the end of the exploration of the human experience, the foreclosure of our own future. There is nothing to be gained here by dwelling on the brutalities, including climate change, we've committed against nature, and against ourselves, which foreshadow the potential extinction of our species but this much can be said: if modern industrial society marks the last of the great civilizations which we've produced on Earth over the last five thousand years or so, then our remarkable success as a species will have become a demeaning failure of will, of merit, of foresight, and of moral intelligence. This too would be emphatically unconscionable.

Recurring cases of morally problematic behaviour are, as indicated above, instructive from a normative point of view, and some do have serious environmental consequences. War despoils the landscape, greed causes excessive consumption, patriarchy diminishes the feminine impulse to nurture, and impoverishment leads to the unsustainable harvesting of scarce resources; but, over the millennia, these examples of harmful behaviour have not raised the spectre of extinction. The expropriation of the lives and living spaces of other species for the benefit of the

¹⁰ Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History*. New York: Henry Holt and Company LLC, 2014.

human animal, however, and the expropriation of our own future for the embellishment of the present are another matter. The wanton razing of life on Earth combined with (even the possibility of) the terminal interruption of the flow of human history should now be the main ingredients of contemporary moral discourse. To this end, a new frame of reference is required.

Notwithstanding the imminent prospect of radical environmental disruption, ethical analysis in general, and environmental ethics in particular, have not prompted a tidal shift in globally held values, nor provoked the kind of massive change in human behaviour which many believe is an indispensable prerequisite for real planetary sustainability. Certainly this speaks to the overwhelming magnitude of the problem at hand, against which the humanities hardly seem a trenchant weapon for battle; but it also suggests that ethical debate might be too limited in its purview, too cautious in its consideration of alternative modes of attack.

One is reminded here of Kuhnian paradigm shifts which entail a transition from ‘normal’ to ‘extraordinary’ science. Kuhn was mostly concerned with the natural sciences, but in the humanities as well new modes of analysis are called for if familiar approaches become too hidebound, unable to cope with anomalies and novel problems presented by new information and experiences. At such pivotal moments in history, researchers sometimes turn to unorthodox methods and speculative hypotheses, making room for “a proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, and recourse to philosophy and debate over fundamentals.”¹¹ Another point of view also supports the perceived need at times of radical change to breach epistemological constraints. Normal versus extraordinary science is directly comparable in the social sciences with what Robert Cox calls ‘problem-solving versus critical theory.’ The former is conventional (solving a puzzle within a predetermined framework) but critical theory, on the other hand, stands apart from the prevailing order of the world and asks how that order came about, calling to question how and whether dominant belief systems might be in the process of changing.¹²

¹¹ Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd edn. Chicago, IL: University of Chicago Press, 1996 [1962].

¹² Robert W. Cox, ‘Social Forces, States and World Orders: Beyond International Relations Theory,’ in Robert O. Keohane, ed., *Neorealism and its Critics*, New York: Columbia University Press, 1986, p.208,

The point here is that contemporary ethical discourse as it relates to the global environmental crisis, and indeed to global governance, is too self-consciously conservative. Despite the plethora of topical literature fraught with dire descriptive and prescriptive analyses, no cogent new insights with the power to penetrate the global veneer of normalcy are forthcoming, and in this respect the discipline needs to sharpen its focus on the significance of the incipient radical disruption of the human enterprise on Earth, and on our moral standing as a species in that context. Only having done so can the ideational component of governance – that is, the discursive content of the new metanarrative which we write for and about ourselves – lead the way to the better path we choose to follow to the future.