

Sense-making and acting for de(s)cent futures: human and cultural pathways

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In the most straightforward terms, descent is the outcome when a given level of social complexity becomes too costly to maintain. Amongst those who study the historical wax and wane of human societies closely, in the more nuanced accounts it's the process by which this descent outcome unfolds that is typically described as collapse. Unfortunately, collapse gets a bad rap in the popular imagination. In one account, it's a magnet for end-of-time doomer-porn fantasy projections. And in another, it's the sworn enemy of civilisation's ever-onward march to futures inherently bigger, better and brighter than the present. My central contention here is that we'll be better equipped to deal with descent futures if we rescue collapse both from its apocalyptic associations and from the idea that it's necessarily inimical to human wellbeing. I'll do this specifically by looking beyond the popular assumption that the processes of both biological and social evolution involve inherent progress towards futures that are better than the present. The essential idea guiding this is that collapse, far from being the cataclysmic phenomenon that it's often portrayed as, is simply the mechanism by which descent unfolds under environmental conditions in which it's an adaptive response.

First though I'd like to quickly summarise the background context for why coming to terms with descent futures is so important, and I'll do this with the aid of John Michael Greer's primary, secondary and tertiary economies, which builds on Schumacher's distinction between primary and secondary goods (Figure 1). The primary economy corresponds with the natural or non-human world, and to the extent that it's taken into account in conventional economic thinking, this is usually via the concept of ecosystem services. The secondary economy is what we conventionally recognise as the realm of economics—production and distribution of goods and services by humans. This is the physical economy. And the tertiary economy is that area of economic activity that involves the creation and trade of financial instruments, or abstract claims on real wealth. This is effectively the control system by which resources are allocated in the secondary economy.

Looking now at the approximate magnitudes of each of the three economies, and starting with the secondary economy, Annual Gross World Product is in the order of US\$60 trillion. Taking the Ecological Footprint indicator as the basis for analysis, this corresponds with consuming the Earth's natural resources at a rate about fifty percent greater than replenishment. In other words, the primary economy can support a secondary economy of around US\$40 trillion. And the tertiary economy, via its multiple claims on the same underlying assets, or "infinite rehypothecation", has been estimated at the rather mind-boggling size of US\$2000 trillion, give or take—though trying to pin this down accurately is likely an exercise in futility.

The relative scale of these three economies is the key to understanding why the environmental conditions we're faced with are ones in which descent via the process of collapse in socio-political complexity shifts from being the stuff of nightmares, to actually being adaptive. Whichever way we wish to frame this situation, we're facing overshoot at two levels: the secondary economy in relation to the primary economy; and on a shorter time horizon, the tertiary economy in relation to the secondary economy, as has been

unfolding around the globe for the past four years. So this is the basis for seeing humanity-scale futures as playing out over the next say century or so in terms of an overall descent trajectory, at least in terms of the nature and scale of the physical economy and the level of social complexity that it can support.

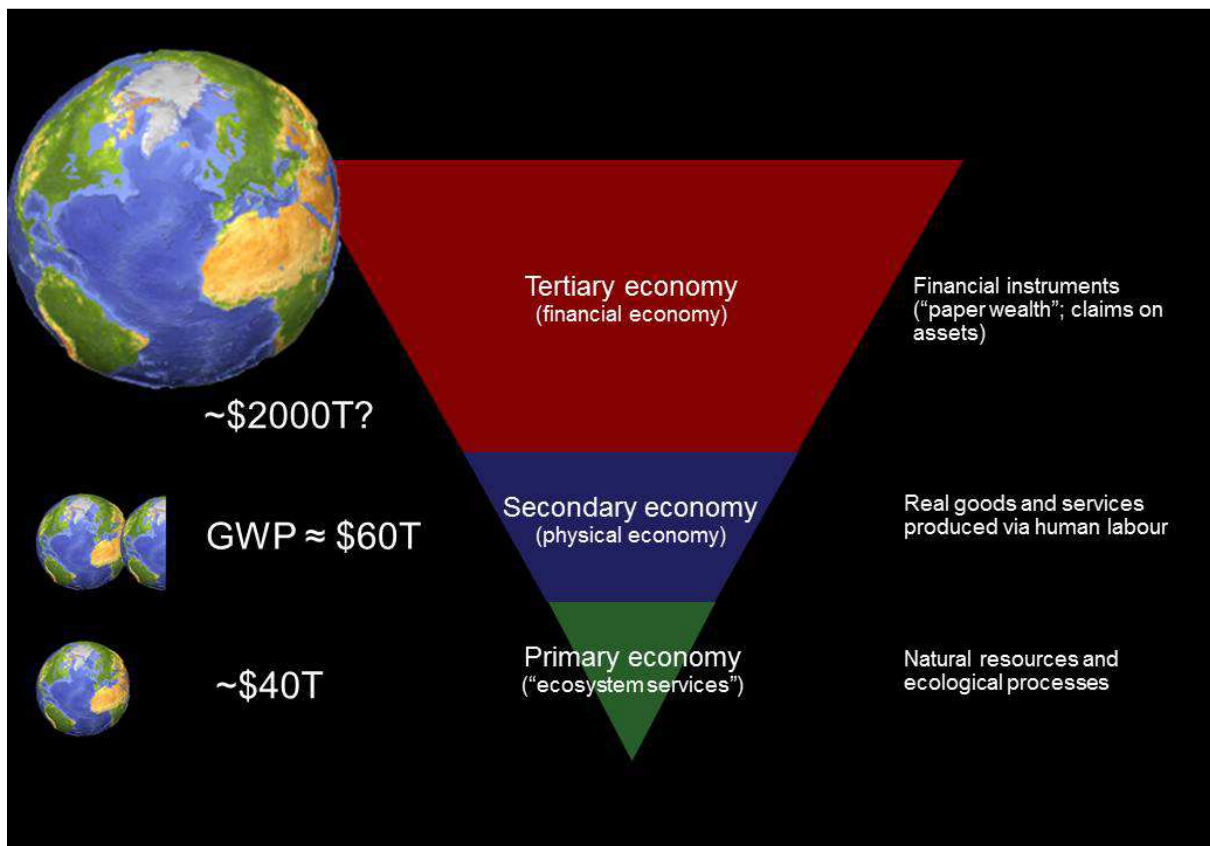


Figure 1: Greer’s three economies

In looking beyond the view that macro-scale collapse is necessarily abrupt, catastrophic and a path to calamity, it might help to consider a couple of micro-scale situations in which collapse processes are adaptive. By way of analogy, consider how we design automobiles to collapse, or crumple, in a collision—reflecting our understanding that there are times we’re better off yielding to hard limits, rather than stubbornly attempting to maintain structural integrity. And in a more mundane example, after hard physical exertion, it’s common to speak of “collapsing into a state of rest.” What’s common to both of these examples is that collapse plays the role of a conservation strategy when some limit has been exceeded—it doesn’t necessarily mark a terminal point, but rather creates the opportunity for regrouping and recovering.

Returning then to the subject of collapse in *socio-political complexity*, my argument is that we’ll be better placed for making sense of our situation and responding effectively if we move beyond the idea that *increasing* complexity is valuable for its own sake, or that it implies inherent progress in the direction of increased human well-being.

As Joseph Tainter has shown, increasing social complexity is a problem-solving strategy. It’s not an inevitable feature of socio-cultural evolution, and it’s not a path that humans tend to choose for its own sake. Increasing complexity always carries associated costs: we have to pay for increased complexity—it doesn’t

exert a “gravitational pull” on us, we have to work at it, and this especially means having adequate resources available to support it. For industrial societies, the definitive resource base in this respect is our one-time fossil fuel windfall. The unique and remarkable characteristics of conventional petroleum are especially significant here—the way of life that allows us to be meeting like this today involves extremes of institutional complexity that are very unlikely to be possible in its absence.

There’s a widely-held article of faith that our present technology-fetishising, growth-at-any-cost trajectory represents the best of all possible evolutionary pathways. Collapse on the other hand is taken to be inherently dysfunctional because it runs counter to that trajectory. But why should we necessarily assume that the trajectory we happen to have been swept along by three hundred years of fossil-fuelled industrial development is inherently worthwhile?

A key to understanding the popular misconception of evolution as progress in the direction of continuous improvement can possibly be found in orthodox evolutionary science itself. The orthodox account is based on a fitness criterion of *optimality*. From the point of view of fitness as optimality, organisms over time become increasingly “better-adapted” to life conditions in a relatively stable, independent environment. This is often mistakenly taken to imply that species appearing later are, so to speak, “more highly evolved” than species that first appeared earlier.

The popular evolutionary misconception has a counterpart in the realm of interior human development that’s been dubbed the “growth-to-goodness” assumption. The assumption is that capacities and dispositions emerging later are inherently more praiseworthy than those preceding them, a view that’s clearly contradicted by psychological research. This conflates the evaluative function of our own norms and preferences in relation to developmental outcomes with what actually unfolds in the course of human growth. These outcomes are far more diverse, less stable and frankly messy than the growth-to-goodness account implies. From this point of view, cultural evolution can be better appreciated as *potentially accumulative* rather than *necessarily progressive*; and while individual development tends towards increasing psychological complexity, this doesn’t in its own right lead to dispositions that most of us would necessarily regard as virtuous.

We have another option available to us for making sense of and guiding our action in a world that looks likely to be far less stable and materially affluent than we’ve become accustomed to. This involves replacing the evolutionary fitness criterion of *optimality* with the alternative criterion of *viability*. In this view, evolution involves *conserving adaptation* between the entity in which we’re interested—be it a biological organism or a set of coordinated social institutions—and its environment. Here, coupled interdependence between an entity and its co-evolving environment provides the basis for assessing what counts as adaptive change. Successful changes are simply those that support ongoing conservation of adaptation.

It’s in this context that collapse can be readily viewed as adaptive. If environmental circumstance favours reduced socio-political complexity, as the present relationships between Greer’s three economies suggests is the case for humanity today, then collapse-enabled descent becomes a potential pathway towards societies with ongoing viability. Various historical and contemporary examples can be enlisted to illustrate this

process of collapse-to-viability in practice. One of the most notable of these is the Eastern Roman empire's abandonment of social complexity in the seventh century CE, but we're also seeing it in a less dramatic form and on a smaller scale when companies contract back to their "core business" as a survival strategy.

But the case for rescuing collapse from its apocalyptic associations and inimicality to well-being can perhaps be best made by considering how well we're actually served in the first place by trying to maintain our present extremes of socio-political and techno-economic complexity.

Tainter points out that contrary to what we often assume, the surplus production characteristic of contemporary industrial societies runs counter to what most people across human history seem to have actually wanted for themselves. He explains this as follows:

"One reason why humans do not ordinarily produce surpluses is declining productivity of labor. In subsistence economies, producing beyond what is needed for annual requirements generates diminishing returns to labor inputs. Both hunter-gatherers and subsistence agriculturalists, who have comprised the bulk of human history, prefer leisure to the time and effort required to produce a surplus. Even in today's economy, people report that they would prefer extra sleep to additional income. Surplus production has not been common in human history, nor has complexity."

In considering what this might imply for laying down viable pathways under conditions of descent, I'll call on the historian Lewis Mumford, who continues to be regarded as one of the foremost thinkers on the relationship between technology and human development. The observations he makes here suggest that social complexity far lower than our own can in fact produce surpluses that others have found to be quite satisfactory. Mumford writes:

"well before the twelfth-century resurgence of urban life throughout Europe, a whole series of technological advances...released labour for other purposes and immensely added to the total productivity of the handicrafts..."

How great this release was can be discovered by the number of holidays the medieval worker enjoyed...as late as the sixteenth century more than half the recorded days were holidays; while for Europe as a whole, the total number of holidays, including Sunday, came to 189...Nothing more clearly indicates a surplus of food and human energy, if not material goods. Modern labor-saving devices have as yet done no better."

The folks at the Australian Productivity Commission would no doubt recoil in horror here. Doesn't this all just point to a failure of vision in relation to material affluence? Didn't those people realise how much better off they might have been if they'd applied themselves a little more diligently to accumulating wealth? I invite you though to hold off on harshly judging the character of our forebears. How reasonable *is* it to assume contemporary values as the gold standard against which to assess their choices? Might they have realised something that we've forgotten today?

Is there a pointer here towards the ways in which descent futures could in fact be decent futures? On this, for my closing thoughts I'll quote Mumford again:

"If one asks why early man took so long to improve his technical skills and his material facilities, the answer must be: he concentrated upon the greatest of all utilities first. By his command of words he

increasingly embraced every aspect of life and gave it significance as part of a larger whole he retained in his mind. Only within that whole could technics itself have significance. The pursuit of significance crowns every other human achievement.”

Bibliography

Greer, J. M. (2008), *The Long Descent: A User's Guide to the End of the Industrial Age*, New Society Publishers, Gabriola Island, Canada.

Greer, J. M. (2009), *The echotechnic future: Envisioning a post-peak world*, New Society Publishers, Gabriola Island, Canada.

Greer, J. M. (2011), *The wealth of nature: Economics as if survival mattered*, New Society Publishers, Gabriola Island.

Gould, S. J. (1997), *Life's Grandeur: The Spread of Excellence from Plato to Darwin*, Vintage, London.

Maturana, H. R. & Varela, F. J. (1988), *Tree of Knowledge: the Biological Roots of Human Understanding*, New Science Library, Boston.

Mayer, T. (2009), "The Great Credit Contraction", Premier Ark, LLC, viewed 11 June 2012 at <http://www.creditcontraction.com/>.

Mumford, L. (1966), *The Myth of the Machine: Technics and Human Development*, Harcourt Brace, New York.

Schumacher, E. F. (1973), *Small is Beautiful: Economics as if People Mattered*, Blond and Briggs, London.

Stein, Z. (2010), "On the uses of the term Integral", Integral Theory Conference 2010, July 29-August 1, Pleasant Hill, California, USA, SUNY Press (forthcoming), viewed 31 October 2012 at <http://integralthinkers.com/wp-content/uploads/On-the-Use-of-the-Term-Integral-Stein.pdf>.

Tainter, J. A. (1988), *The Collapse of Complex Societies*, Cambridge University Press, Cambridge.

Tainter, J. A. (2011), "Energy, complexity, and sustainability: A historical perspective", *Environmental Innovations and Societal Transitions*, Vol. 1 No. 1, pp. 89-95.

Thompson, E. (2007), *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*, Harvard University Press, Cambridge, Massachusetts.

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