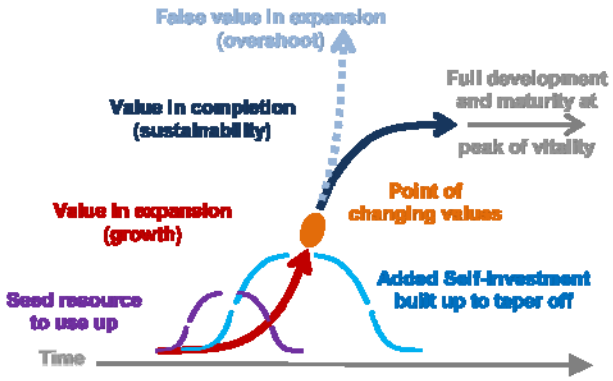
Economies That Become Part of Nature

Philip F Henshaw

An interesting general problem with theories is they don't need to be correct so long as following them seems profitable. We invariably leave it to nature to fill the gaps. So "in theory" runaway growth in consuming every useful thing on earth, and our creative searches for substitutes apace, will always work. It has been very profitable for centuries. It only has a problem in reality. It creates gaps in finding what to do next, that nothing will be able to fill.

Curiously, its often natural system economies that work completely on their own that we rely on to fill our gaps, and begin with the equivalent of runaway growth. They generally stabilize at the peak of their vitality instead of in collapse. We could study that with the idea to imitate them. Scientists may often say "there are no systems, just pressures" and dismiss the idea. Using equations to represent them as following pressure rules has been profitable, indeed, but might also be missing something. How nature's systems operate as wholes could be hidden from us by our point of view, just as when we look inside an organism and don't see what rules make it alive.



Natural System Economy, Business Model & Learning paths

Our own bodies operate as collectively run market organizations of cells, after all. Cells exchange complementary services that use the blood stream and nerve system networks as pathways for resource and information exchange, like exchanging messages in a bottle. A fresh water pond ecology is also a system of independent communities and individual organisms, creating their own niches by exchanging complementary goods and services. Human cultures and businesses also form around the exchange complementary services between their self-animating parts, with internal networks that operate as wholes in interacting with their larger environments.

Nature in the gaps

How to learn from these complex natural system economies is to closely study their developmental histories, and how they act do it. You start with a few things you can know for sure, and one of them is how little it is possible to know. People have the most difficulty understanding how, without central control, they seem to act as wholes in actively learning about their own environments, and becoming integrated with them. It's the active learning of their parts in making use of each other. It's the brick layer and the baker working to make a village, and the flower and the grub cooperating to make soil. It's economies and their parts exploring their own environments to use of what they find that makes them fit together. It's that self-investment in learning that fits the self-animating parts of systems together.

Our economic system is clearly very good at this kind of whole system learning, foraging, dodging and adding new adaptive features to itself, everywhere all at once. The "glue" is not rule following. The glue is active learning. It's the basic sign of a natural system economy. You can know for sure no part understands its contribution to the whole, and only "the nature of the system" fills the gaps. The risk of creating ever bigger gaps is creating ones that can't be filled, bringing our great "run of luck" to an end.

What steers the search, learning and change of natural system economies is the product they devote to that, their self-investment. It's what discovers and makes use of their opportunities, just as financial economies do with the use of business investment in innovation. Financial investment is the macro-scale corollary of a natural system's organizational leaning process. It's the active process of inventing and making new system structures and relationships.

Natural system economies, large or small, begin with a seed resource and "run of luck" for the "germ of a good idea" for creating relationships in the environment. They start with multiplying findings and explosions of returns. The successful systems of nature then somehow make an internal switch. They switch from using multiplying returns for multiplying their searches to completing their own designs and freeing themselves of a need for further searches. It solves the problem of needing to keep running ever faster to just stay in one place. That's what the other alternative economic models don't address yet, how to end the endless search multiplier that keeps our economy from stabilizing and becoming a part of nature.

The "economic democracy" idea proposed in WorldWatch by David Schweickart, the "transformative technology" ideas of Paul Hawken and the Lovins's in Natural Capitalism, the "transformative governance" or "sustainable development" ideas behind the models of Herman Daly in Beyond Growth or Gus Speth in The Bridge at the Edge of the World, and others, all still contain the central problem we start with. They all have good ideas but don't point to the necessity or possibility of altering the cycles that drive our endless exponential search for new ways to use up the earth.

Nothing in the gaps

There's an elegant certainty that points to a solution. It was first discovered by JM Keynes and then added to by Kenneth Boulding, and then used by me to show the riddle of natural systems. Perhaps those who read chapter 16 in Keynes' General Theory or Boulding's last chapter in Reinventing Economics, or my papers, were embarrassed to not quite understand or too hesitant to ask the excellent "dumb questions" it raises. The question is how to arrive at "peak money". It comes to a simple choice, either a) investment stops growing because conditions are so bad that returns on investments don't materialize, or b) healthy returns earned by investments are recycled as spending, instead of being used to accumulate ever more investment until (a) occurs. Successful economies end their own investment cycle.

There's a practical way to phase in workable rules. You'd start with what can be defined with certainty, and qualify the tax status and right to reinvest returns according to long term sustainability. There are difficult technical and theoretical issues to face, but is no solution without it. You'd start today with what we know for sure, that we've got to have our economy become part of nature.