

Thinking Through the Ecological Economic Notion of Steady-State Economics



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Opinion

I first encountered the work of Drs. Daly, Costanza, Perrings, et. al. at a time when I had just committed myself to understanding what it meant to take “an ecosystem approach” in planning. As such I was particularly enthusiastic about a body of work that seemed to give us both an imperative to act, and the means whereby to adjudicate the consequences of our actions. It seemed to me Ecological Economics offered both a necessary and sufficient basis upon which to craft a theory of planning. But the more I read in the history and science of ecology, social theory and evolution, the more reservations I found myself making. Briefly put, I began to suspect that Ecological Economics, as a movement, is not particularly ecological, makes little room for evolution, and rests deeply on a hard separation of humans from nature. And yet, there is too much that I find savvy in the economic arguments of Nicholaus Georgescu-Roegen and Dr. Daly, and the ecological arguments of Robert Costanza and others. So I would like at least to relocate the sources of my resistance, and present three of these.

The rhetoric of limits

There is something particularly seductive and appealing about the idea of limits. It seems commonsensical that things in a finite world must be finite. After all, there is only so much planet to be had. And the call to limits has always been a mainstay discourse, in both resource management and environmentalism. Carolyn Merchant [1] documents the concerns of John Evelyn and Samuel Pepys about forestry resources in mid-1600s England, and their discourse is stunning in its similarities to what we hear today. Thomas Malthus [2] developed the mechanisms for arguing the limits to natural population in the mid-1700s. Similarly, George Perkins Marsh [3] set a high standard for environmentalism in the mid-1800s, in the sophistication of his call to limits. There is no doubt in my mind that the world today is fundamentally a different place, and that we are quite actually closer to planetary limits than we ever should want to be. Nor do I buy the substitutability arguments commonly raised by attackers of the idea of limits.

Yet, as Galileo had it, the world does move. First, the boundaries we make when we name many of these things of concern (fuel, raw materials, food) are not inherent in the things, but are artifactual constructs that change with intent and with purpose. And second, we (nature in the round) respond to circumstance as much as circumstance responds to us. Then it's not about “substitution” (a particularly mechanistic concept) but about responsiveness. Horst Rittel's postulation of “wicked problems,” [4] Martin Krieger's presentation of “sticky systems,” [5] and Lovelock and Margulis's Daisyworld model [6,7], together seem to force a quite different conception of how the world happens and how we need to take natural occurrence.

At first glance, it seems Ecological Economics does itself a disservice by tying itself so strongly to the factuality of limits. But to suggest that it not do so raises another problematic, I think. Can we have a theory about how we might plan differently without siting it upon a hypothesis for why we should act differently? If this is the case, and without wishing to be overly Popperian, does not the former become so much more unattainable, being then contingent on the ability of the latter to resist falsification? Especially as we begin to recognize the implications of scale hierarchic organization [8] for descriptions of reality--in that we can always find some level of organization, some perspectival location, and some scale of description at which any assertion of reality can be perverted [9].

The (apparent) reification of Steady State Economics

There seem to be two related sources to my resistance here. First, and idiosyncratically perhaps, I keep waiting for some utopian clarion call to reclaim Eden--some mythic “balance of nature” that would assure us comfort and cornucopia, denying the possibility of catastrophe and oblivion. More significantly, the arguments behind the growth versus development formulation of Steady State Economics remind me perversely of Cynthia Russett's discussion [10] of the contesting conceptions of progress and evolution held by Auguste Comte and Herbert

Spencer. To caricature grossly, Comte's sociology held that progress was cyclical equilibrium and evolution open-ended, while Spencer held that progress was ever-upward toward some perfect final state. In some simplistic sense (and to reveal fully my lack of economics) Steady State Economics and conventional economics seem to me to take half of each--with Steady State Economics arguing that progress is equilibration toward some ideal state and conventional economics arguing that progress is simply directional and unending.

The conceptions of equilibrium on which Steady State Economics seems to rest (in spite, I think, of Dr. Daly's consistent attempts to disallow a static conception of equilibrium and final states), seem different from the dynamic and perturbational ecological equilibria revealed collectively by the work of ecosystem ecologists such as CS Holling (in evolutionary landscapes) [11], Eugene Odum (in succession theory) [12], and Stewart Pickett (in patch dynamics) [13]. As Holling has argued, when equilibrium is taken evolutionarily, aiming for stability may be a very good way of assuring we'll miss the mark altogether. I doubt there is any simple explanation of the problematic embedded in the worldviews of Steady State Economics and Ecological Economics, but Pepper's discussion of root metaphors [14] may help to explain some of the internal contradictions that seem to be built so deeply into the conceptual (and historic) framework of the movement.

Unresponsive humans and typological nature

The exchange between Dr. Mark Sagoff and Dr. Daly [15] made wonderful reading. To the extent it was a debate, I don't doubt the round went to Dr. Daly. However, there was one (incidental) point raised by Prof. Sagoff that stays with me--that Ecological Economics falls victim to the same paradigmatic trap which it seeks to displace in conventional economics--of a linear, mechanistic, Newtonian modeling (in making the clear and impenetrable separation between natural and man-made capital).

This becomes even more problematic for me when humans and nature are generalized beyond experiential recognition and disallowed attenuating, responsive movement. Take the problem of over-population. By way of background, I come from India, where in the 1960s and '70s population control was deeply embedded in everyday life. Of course, I also saw the quite particular effects on quite particular individuals that such measures had, and the sometimes devastating price individuals paid for this "global" need. Yet neither the notion nor the need was alien to me. But the world moves on. There are time lags no doubt (reculturaltion, like acculturation, is a time-sensitive process). Still, a pressure that is imperative today becomes redundant tomorrow. And as a recent modeling study by the International Institute for Applied Systems Analysis suggests, the odds of another doubling are at the very least dropping rapidly.

Or take two (no doubt trivial) points from the discussion here of globalization and free-trade. In globalization, the discussion on capital mobility seemed to postulate an exclusive opposition between relative and absolute scarcity. But if we take a more ecological, niche-making model of particularized opportunistic diffusion, then patterns will be patchy and differential, processes will be sticky and discontinuous, and the interesting questions are about where and how, rather than whether or not. In the free trade discussion, the issue of child labor is often raised. I know well the occasionally inhuman, often exploitative, and usually unethical conditions of child labor in India [16]. But that is only one dimension of a layered and nested reality. As long as we hold to such a unidimensional, essentialist view, it's easy to propose tariffs and barriers. And no doubt restrictions would be beneficial for all at the societal level of organization, but the results are quite different at the level of individuals. Similar instances, I think, can be found of the ways Ecological Economics in its Steady State Economics manifestation often appears to typologize nature, denying it much say or standing in the formation of potential futures.

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17. Incidentally, compare this to the equally inhuman and exploitative conditions under which "mobile" agricultural labor works in Central California, USA.



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