

Industry, Efficiency and Corporations

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I would like to raise the following points regarding Thomas Lough's "Energy, Agriculture, Patriarchy and Ecocide." First, he blames the destruction of habitat on inefficient food production, but makes no mention of industrial (i.e., large-scale, machine-based) commodity production. Food and other human bodily needs — though their production may require increasing amounts of energy due to inefficiencies — remain finite needs.

Using Lough's own figures, human food requirement is 2,500 calories/person-day. For 365 days and 5.6 billion persons, the world therefore needs 5.1×10^{15} calories. Lough's worst case food production efficiency of 0.1 means an energy requirement up to ten times higher, or 51×10^{15} calories. This is equivalent to around 35 million barrels of oil. Yet, the world today consumes in oil alone (i.e., not counting coal, nuclear and other energy sources) around 23 billion barrels per year, or around 660 times larger than the energy requirements for food production!

I suggest that it is profit-seeking through commodity production that recognizes no limit. It is the engine that propels the non-stop transformation of raw materials from nature into finished products for sale in the market. I believe that if we were to identify the roots of the environmental crisis, this — rather than inefficient agriculture — would be the process to look into.

Second, Lough's adoption of efficiency (or gain maximization) as the measuring stick for desirable social practices needs to be reviewed. It is true that today's economics puts gain maximization on top of its priorities. But other criteria have guided human behavior in the past. I would suggest an alternative measuring stick: reliability (or risk minimization).

It was Adam Smith who provided the theoretical foundations for the gain-maximizing strategy, by showing that individuals who maximize gains for themselves are supposedly maximizing the gain for society. Since then, gain maximization has become the mantra of economics, and the unabashed pursuit of self-interest has even become a moral imperative.

Among hardware and software systems designers, the debate between efficiency and reliability has a long history. But unlike economists, systems designers have concluded that reliability is a better measure of a design's fitness. Thus, most of their design heuristics enhance reliability rather than efficiency, when the two conflict.

The Precautionary Principle, often advocated by environmental groups, is also a restatement of the same idea: that reducing risks should take precedence over maximizing gain.

It would be an interesting exercise to determine what kind of economy — and society — would emerge if most members pursued a risk-minimizing rather than a gain-maximizing strategy. I would expect a society that encourages resource conservation rather than exploitation, cooperation rather than competition, and the expansion rather than the privatization of public commons. I would further expect a society constrained by the limit of zero risk. Again, maximizing society's optimum is infinite gain, which poses no constraint at all.

There are indications, for instance, that many pre-industrial communities tend to minimize risk when optimizing their resources. Corporations, on the other hand, would optimize these same resources by maximizing their gain. We can expect that the optimum level of resource-use from the corporate point of view will tend to be higher than from the communities' point of view. Thus, to corporate eyes, as well as to all gain-maximizing interested parties, the community resources would appear to be under-utilized, while the communities themselves would believe their resources are already deployed optimally. Here's the germ of various resource conflicts that is so common in the countryside.

Third, the personality that embodies in pure form both industrial commodity production and gain maximization is of course the corporation. Modern society, taking Adam Smith's gain-maximizing idea to its conclusion, has created a legal person that is guided by one and only one motive — the maximization of profit.

Let loose among humans and competing with them for economic advantage — it is a no contest. Unhampered by such human needs as air, water or food, and unhindered by such human weaknesses as pity, love, guilt, fear, or kindness, corporations have exceeded all expectations in their relentless effort to transform raw materials from nature into finished products in pursuit of infinite gain.

It may even be said that corporations are a new organism altogether, higher on the food chain than *H. sapiens* and immune to many of the problems that the latter is prone to. Having learned how to fight for their rights ("liberalization"), avoid human-imposed restrictions ("deregulation"), and take over government functions ("privatization"), they are now fashioning the entire world in their own image ("globalization").

This is why the world's ecology today is in crisis.

Endnote

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