

RECONCILING PROFIT WITH BIODIVERSITY AN INVENTORY OF RESOURCES READY TO HAND

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In short compass, I am to make a proposal that reconciles profit with biodiversity.¹ The odds against such a feat are overwhelming, if for no other reason than the trajectory of history itself, which defines human achievement as lying outside the biogeophysical processes that sustain life on this planet. Conventional measures of profit confirm this premise, as the depletion of natural capital - a term of art referring generally to biogeophysical processes and ecosystems, such as grasslands and forests - nowhere figures in the accounting system.² Furthermore, despite the substantive contributions of the Biopolitics International Organisation to the end of building an epistemic consensus among diverse constituencies, such as corporate executives, politicians and conservation biologists, as well as the analytical instruments devised by such theorists as Professor Udo Simonis,³ civilisation teeters precariously on the precept of an anthropogenic mass extinction of life.⁴

I see slight purpose in pursuing intellectual business as usual. There is little to be gained by further arguments that marketplace economics, such as profit maximising, either directly or indirectly fuels the degradation of habitat, deterioration of biosystem services and extinction of species. Rather, I intend to stand back from and characterise the conversation⁵ that has periodically touched on the issue of reconciling profit and biodiversity, particularly, to the end of implementing strategies - for sustainable production processes, carbon taxes, and the like - such as those proposed by Professors Wilson, Simonis, and others. I am particularly interested in human agency, the power of human beings, acting collectively, as organised into epistemic communities, as well as individually, to promote change: through our intentions we are the primary resource.⁶ Bearing in mind that a single essay can do little more than point in a particular direction that might augment efforts to create a sustainable global society and that the complexity of the issues compels painting with the broadest of brush strokes, I begin with three points that constitute assumptive bedrock.

First, it is almost a certitude that the human species has, through its reproductive success, technological prowess and material demands, initiated a mass extinction event. Clearly, the evolution of political economy has been driven by a bio-material dynamic: population growth.⁷ Such scientific luminaries as E.O. Wilson and Michael Soul, provide stunning documentation of the reality of mass extinction. The human species, Professor Wilson argues, is an ecological aberration: never has a single terrestrial species of similar size approached our numbers (the human population is at least a hundred-fold greater) and never has a single species appropriated so much of the earth's biogeophysical product for itself. We are consuming approximately 45% of the available resources to sustain ourselves.⁸

Avoiding all subtleties of ethical analysis, such as a comparison of strong anthropocentric with biocentric positions, one interesting aspect of mass extinction is this: the previous five left no land creatures much larger than the size of beetles. There is a real question as to the likelihood of the survival of Homo sapiens in a biologically impoverished - biodepletion to the point of mass extinction - world. Given the additional insight that 99.9% of all the mammalian species that have ever existed are extinct - due to environmental exigency beyond adaptive potential, causing me to wonder why economics has been called "the dismal science" rather than evolutionary biology - we have some reason to be concerned for the long-term human prospect. However, exemptionalism, the notion that we, in our exalted state, are somehow free of nature's constraints, rationalises away this concern.

Second, whatever our aspirations, no plan exists that reconciles the needs of the world's economically destitute, that is, the one-third to one-half of all humans who live in poverty, with the prevention of a mass extinction. While Our Common Future (1987), written by the Brundtland Commission (the World Commission on Environment and Development, established by the UN in 1983), deserves credit as a catalyst for the conversation concerning sustainable development - roughly defined as economic growth that ameliorates poverty without compromising the ability of future generations to meet their needs - it serves better as an illustration of problems to be solved, such as determining the human carrying capacity of the planet and appropriate levels of consumption consistent with the protection of biodiversity, than as a guide to specific policies and actions. Our Common Future also scientifically founders on the assumption that there are no limits to growth.⁹

Even Agenda 21 (1992), the summary document from UNCED, has been subjected to increasing criticism. No doubt, despite its instrumental undertone, the precautionary principle¹⁰ (Principle 15) is a step in the right direction. But to its critics Agenda 21 is a failure, and that for many reasons. (i) To name one, it lacks the binding force of international law, thus amounting to little more than an exhortation to moral virtue. (ii) Further, its dominant philosophical underpinning is unrelentingly and strongly anthropocentric.¹¹ Thus, insofar as planetary destruction is a consequence of the unbridled economic exploitation, Agenda 21 does nothing to check that process. Principle 1 of the Rio

Declaration unequivocally states that "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." Despite additional principles, such as the fourth, which specifies environmental protection as an integral part of development, Principle 1 is scientifically tenuous and ethically suspect. Nowhere in Agenda 21 do we find the slightest inkling that the creation, in all its diversity and mystery, has value for its own sake (intrinsic value) beyond instrumental values, that is, appropriation for human need. (iii) And finally, Agenda 21's proposals for economic development to serve an ever growing human population seem wildly incongruent with the realities of sustainable existence on a small planet. Even ignoring the environmentally pathological consequences of the present lifestyles of the Western world's industrial democracies, a six-fold increase in economic throughput would be required to bring all the world's peoples to that standard of living by the year 2100.

The third assumption is this: without the production and distribution of the wherewithal for survival that is facilitated by industrial capitalism, large numbers of human beings, perhaps as much as half the population, would starve to death within a matter of weeks.¹² Pragmatism alone forces us to recognise that whatever actions the human species might take to avoid the sixth mass extinction of life, these actions will for the foreseeable future occur within and not outside the framework of industrial capitalism: we ignore the profit motive at the risk of condemning our analysis to idle speculation.

Consequently, the many studies and proposals of the kind such as Stephan Schmidheiny's *Changing Course: A Global Business Perspective on Development and the Environment* (M.I.T., 1992) and Paul Hawken's *The Ecology of Commerce: A Declaration of Sustainability* (Harper Business, 1993), that is, any and all discourses that assume industrial capitalism as the frame within which the twin problems of economic destitution and environmental degradation are considered, are of more than a little significance. For whatever their insufficiencies they "get down," that is, are pragmatically realistic rather than dystopian or utopian. We need more of these kinds of efforts, particularly joint efforts involving capitalists, politicians, ecological economists, and an array of "environmentalists," such as conservation biologists and systems ecologists.¹³

To summarise: I have claimed that a sixth mass extinction of life is underway, that the human species lacks any realistic plan for dealing with the problem, and that a large portion of the human population is almost totally dependent on industrial capitalism to provide the material wherewithal for life. Thus, if *Homo sapiens* is to avert the uncertainties of mass extinction, the future begins with the present realities of industrial capitalism.

What Are Intellectuals For?

Though I find little that is pragmatically constructive in either Marxist or neo-Marxist analysis¹⁴ that is apropos of the global problematic, Marx's observation in *Theses on Feuerbach*, to the effect that intellectuals have long speculated about the world without changing it, is germane. In the context delineated above, the dominant analytical (intellectual) frameworks that examine industrial capitalism apropos of ameliorating poverty and protecting biodiversity are more problem than solution. Painting in very, very broad strokes, four kinds of theories - ignoring specific theories within these kinds - bear on the issues at hand: these are critical theory, development theory, functionalist theory and ethico-theological theory.

Critical theorists contend that the institutions of the market necessarily exploit the land and labour (people). From this perspective decisions made to optimise rate of return on investment - the profit motive - inevitably undercut habitat, soil fertility, water quality, and so on, in ways that threaten biodiversity. Further, critical theorists argue that corporations and the propertied class enjoy disproportionate political power, using this power to institutionalise their objectives at the expense of developing nations, global ecology, and even future generations of human beings. Thus the increasing political and economic power of multinational corporations - ostensible profit optimises - forces the conclusion that a mass extinction is a near certainty, since State regulation, that is, legal constraint of profit maximising behaviours that degrade habitat, water quality, and so on, will become increasingly ineffectual and new regulations unlikely. Accordingly, overcoming the problems of destitution and ecological dysfunction entails a veritable and immediate revolution in political economy.

Such a position is inherently dystopian and thus futile, since those who would lead the reconstruction of society based on the critical awareness of its insufficiencies are, paradoxically, intellectually defeated from the outset. Given the scenario of critical theory, creating tomorrow depends upon obliterating the realities of today: such a strategy is impossible. Whatever the manifest dangers of the present, we can only move toward an alternative future by departing from the ground upon which we stand.

Development theorists argue that the institutions of the market are necessary to ameliorate poverty and to protect the global commons. Policy instruments alone, such as pollution taxes and tradable pollution permits, are argued to be sufficient solutions to environmental problems such as degradation of habitat and other economic externalities. Such theories avoid any call for a global revolution in political economy, remaining consistent with the hegemony of nation states, private property, and multinational corporations. Development theorists also argue that poverty itself leads to environmental ruin, since destitute people will rationally act in the short-term to preserve their lives, even if such actions entail long-term degradation of environmental resources. Accordingly, the creation of global markets is the sine qua non of a sustainable global civilisation.

On this account, termed the utopian position, profitability ensures that capital is invested through global markets where return on investment is greatest, thereby guaranteeing economic efficiency. Market guided investment is argued to be the only viable long-term strategy for feeding the world's hungry and ultimately overcoming poverty. Roughly the argument is that without investment, lured by the promise of profitable return, flowing into the world's developing nations, industrialisation will be impossible; and without industrialisation, these nations will remain locked in the grips of destitution, and self-perpetuating cycles of over-population (fertility rates beyond replacement) and environmental degradation will continue. Agenda 21 is the best known of these theories; however, the actual course of events is at variance with the program for sustainable development while conceptual analysis has shown it to be theoretically incoherent.¹⁵

Functionalist theorists are somewhere between critical and developmental theorists; whereas the former see no hope for a better tomorrow through the institutions of the present, the dystopian position, and the latter see great hope through globalisation of industrial capitalism, the utopian position, functionalists argue that nonmarket strategies are necessary to overcome the inherent limits of the market. For example, functionalists argue that a free market avoids investment in impoverished nation's due to political instability; thus, such institutions as the World Bank are necessary to provide the capital to build an industrial base in developing nations. Or, to take another example, debt-for-nature swaps offer win-win scenarios, so that impoverished nations with huge foreign debts and rich biodiversity resources can swap critical habitat for debt forgiveness, on the promise that interest will be used to finance conservation reserves.

Despite avoiding the perils of dystopian and utopian analysis, even functionalism seems to founder on the shoals of reality. Despite - or is it because, as some critics charge - efforts of the World Bank, the gap between the world's rich and poor nations continues to widen. For more than 15 years there has been a net transfer of capital from the developing nations to the developed nations. The net annual transfer in the 1990's has been at least US \$40 to 50 billion; for 1984 through 1990 the total transfer was approximately US \$200 billion. And debt-for-nature swaps have neither significantly reduced Third World indebtedness nor preserved large areas of biologically sensitive habitat from economic encroachment and ecological degradation. Worse, some nature preserves created through debt-for-nature swaps have adversely affected indigenous, subsistence-based tribes who lived in harmony with the creatures for centuries, even millennia.

Finally, ethico-theological theory argues that the institutions of the market must be constrained within a larger framework of value and meaning that goes beyond any and all calculations of instrumental value. While such theories often recognise the legitimacy of profit, utilitarian values are trumped when necessary by appeals to higher values, such as the sacred or the just or the beautiful. Or even the love of life, biophilia. Thus the pursuit of an instrumental value such as profit would be constrained whenever, for example, critical habitat necessary to the survival of an endangered species was at risk. However, ethico-theological theory often finds itself in a tenuous position when the economic interests of impoverished human beings - social justice issues - come into conflict with habitat and survival issues, or when private property rights trump preservation and conservation efforts - so-called taking issues. More generally, such theory often amounts to little more than a faith in the world that ought to be that is unable to overcome the potent political power and economic force of the world that is.

Conclusion

Are such theories likely to reconcile profit with biodiversity, to bring industrial capitalism into a condition of relative equilibrium with biodiversity? I contend that they will not, at least not single-handedly. Since pessimism, dystopian analysis, is a self-confirming theory, and optimism, utopian analysis, is a self-deluding theory - wishful thinking - realism compels the effort to find a middle ground: pragmatic meliorism. Functionalist and ethico-theological theories might find their greatest hour within such a context. Pragmatic meliorism has at least two virtues.

First, it recognises that knowledge is social and rooted in a problematic context, thus enabling itself to gather from the many available theoretical frames of reference. Clearly, these frames of analysis are important resources ready to hand. For example, from critical theory pragmatic meliorism might acknowledge the manifest inadequacies of the governing paradigm without falling into the trap of dystopian analysis. From development theory it might acknowledge the need to deal simultaneously with issues of biodiversity and destitution; neither the global commons nor local landscapes are secure in a world where a global middle class of perhaps 20% of the human population enjoys the largesse from more than 90% of the earth's resources. From functionalist theory pragmatic meliorism might seize upon the notion that headway toward sustainability can be made through a variety of correctives to the market; a carbon tax, for example, would expeditiously move global civilisation away from hydrocarbons toward solar energy, ideally, while also supplying needed capital for Third World development. And with ethico-theological theory it might begin moving toward some alternative definition of Homo Economicus that limits short-term satisfying and profit-maximising in the long-term interest of social justice, economic sufficiency, and human dignity.

Second, and more importantly, pragmatic meliorism presupposes, indeed, necessitates leadership from the business community, that is, those individuals who collectively constitute the elite's who run the machinery of industrial capitalism. Such an acknowledgement of this enormous human resource is, in truth, implicit in the analyses of critical, developmental, functionalist, and ethico-theological theories.¹⁶ Many, many other observers, such the Business Council for Sustainable Development, whose membership is constituted by a blue-ribbon roster of 48 CEO's and Chairmen of the Boards of national and multinational companies from all regions of the world, have recognised the importance of leadership. Despite its many insufficiencies, such as only a minimal recognition of the importance of biodiversity and a relentlessly anthropocentric perspective, Changing Courses, the official report of the BCSD, unequivocally states, to its great credit, that the business

community is responsible for taking the lead in creating a world that overcomes destitution and environmental degradation: "In general, during the past 20 years, business has tended to be overcautious and conservative in its approach to environmental challenge. Society can no longer afford this. It is time for businesses to take the lead; change by business is less painful, more efficient, and cheaper for consumers, for governments, and for businesses themselves. By living up to its responsibilities, business will be able to shape a reasonable and appropriate path toward sustainable development."¹⁷

Let me put the challenge to business people, to the individuals who serve as controllers and engineers, vice presidents in charge of marketing and corporate executive officers, and so on in a different idiom: you virtually have the power of gods (and you should be very, very nervous about it). The business elite has a discretionary decision making power that humanity has never before had, a power to decide that is virtually godlike, affecting untold numbers of life forms on this planet as well as the lives of nearly 500 trillion human beings. Consider the following analysis:¹⁸

- The human species, through its numbers, through its technologies, and through the sheer level of economic demand placed on local, regional, national and global biogeophysical processes has precipitated an extinction crisis, biodepletion, prospectively a mass extinction event that will witness the eradication of more than 50% of the earth's species by the year 2100.
- Though the extinction of any species is irreversible, the evolutionary process might, over a period of time calculated to be at least 5 million years, regenerate diversity through replacement species.
- Thus, if decisions are not made beginning today and continuing through the next decade - time is of the essence! - to check the extinction event we have set in motion, the biosphere will be impoverished for the next 200,000 human generations, estimating a generation as 25 years.¹⁹
- Never have so few had the power to affect so many for so long; and never have so few had the power to make such an enormously consequential choice.

In my opinion, a society whose elite's however socially legitimated their motives and however self-fulfilling their ego consciousness²⁰ have lost touch with the reality of their own power and the responsible exercise of that power is a society destined for a speedy end. I can only urge them to consider the monumental issue at hand: the reconciliation of profit with biodiversity. Pragmatic meliorism does not entail revolution in the dominant political economy, but rather proceeding from where we are, attempting to escape the sub-optimising that is inherent in decision-making by business elite's unable to re-conceptualise profit in a larger-than- economics context. The profit motive, framed in quarters, years, or even decades, unless re-contextualised within the larger biogeophysical reality of life itself, is a short-term satisfying that leads to an enormously risky and uncertain future.

References

1. I use "profit" with its conventional connotations, such as return on investment, net income over and above operating expenses, and the like. By "biodiversity" I mean the totality of the domain of life (construed as species, the totality of the domain of life cannot be estimated even to the nearest order of magnitude). See Robert Paehlke, ed., *Conservation and Environmentalism: An Encyclopaedia* (New York: Garland Publishing Co., 1995). The reader is advised that an enormous simplification of technical questions is necessitated by the constraints of the "short essay."
2. For an introduction see Paul Ekins, Mayer Hillman, and Robert Hutchinson, *The Gaia Atlas of Green Economics* (New York & London: Anchor Books, 1992). Also see Ann Mari Jansson, Monica Hammer, Carl Folke, and Robert Constanza, eds., *Investing in Natural Capital: The Ecological Economics Approach to Sustainability* (Washington, D.C.: Washington D.C.: Island Press, 1994)
3. See Udo E. Simonis, "Towards a 'World Budget'-Thoughts on a World Resource Tax," in Agni Vlavianos-Arvanitis, ed., *Biopolitics: The Bio-Environment* (Athens: Biopolitics International, 1991), 198-201; Udo E. Simonis, "Structural Economic Change and the Bio-Environment," Agni Vlavianos-Arvanitis, ed., *Biopolitics: Business Strategy for the Environment* (Athens, Biopolitics International, 1995), 27-42; and Udo E. Simonis, "Toward a Houston Protocol-CO2 Emission Reductions Between North and South," in Agni Vlavianos-Arvanitis, ed., *Biopolitics: The Bio-Environment* (Athens: Biopolitics International, 1993), 128-150.
4. Among many scientific sources see Edward O. Wilson, *The Diversity of Life* (Cambridge: The Belknap Press of Harvard University Press, 1992).
5. I arbitrarily define that conversation as beginning with the 1972 UN Conference on the Environment in Stockholm and continuing through the 1992 United Nations conference on Environment and Development in Rio to the present day. The conversation entails a vast literature that no single human being could conceivably hope to read, let alone master; collectively considered, however, it represents the attempt by the human species to adapt to the changing circumstances of ecosocial existence, circumstances which threaten potentially irreversible and catastrophic changes for civilisation.
6. On metabiological evolution and human agency see Jonas Salk, *Anatomy of Reality: Merging of Intuition and Reason* (New York: Columbia University Press, 1983); and Charles Taylor, *Human Agency and Language: Philosophical Papers 1* (Cambridge: Cambridge University Press, 1985).
7. See Allen W. Johnson and Timothy Earle, *The Evolution of Human Societies: From Foraging Group to Agrarian State* (Stanford,

Calif.: Stanford University Press, 1987).

8. See Wilson, *Diversity of Life*.
9. See for example Gro Harlem Brundtland, *Scientific American*, September 1989.
10. Principle 15 states that "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradations."
11. For a critique of anthropocentrism see Dr. Agni Vlavianos-Arvanitis, ed., *Business Strategy*, 7-17. She notes that "The anthropocentric attitudes of present day society are threatening to the very essence of the continuity of bios."
12. Industrial socialism, as in China, is ecologically untenable, though its system of production does not run on a profit motive; thus perhaps 1 billion Chinese would temporarily endure, as would a few hundred millions of people still involved with subsistence economics. The rest of us would be in major trouble. Consider that the processes of production and distribution of industrial capitalism are so efficient that New York City, London, and Athens and the other great metropolises of Western civilisation have barely more than 3 or 4 days of food on hand.
13. Cf. e.g., the report of the United States National Commission on the Environment, *Choosing a Sustainable Future* (Washington, D.C.: Island Press, 1993).
14. See Nicholas Georgescu-Roegen, *The Entropy Law and the Economic Process* (Cambridge: Harvard University Press, 1971). The argument that there are physical limits to economic throughput applies equally to industrial capitalism and socialism: neither addresses the issue. One neo-Marxist analysis that effectively escapes such criticism, through recognitions of physical limits, is Peter Dickens, *Society and Nature: Towards a Green Social Theory* (Philadelphia: Temple University Press, 1992).
15. The UN CSD (Commission on Sustainable Development) has thrice announced the failure of Agenda 21: poverty and deterioration of the biosphere continue to worsen. For a concise analysis of the theoretical incoherence of the "theory of sustainable development" see Paul Ekins, "The Environmental Sustainability of Economic Processes: A Framework for Analysis," in J.C.J.M. van den Bergh and J. van der Straaten, eds., *Toward Sustainable Development: Concepts, Methods, and Policy* (Washington, D.C. Island Press, 1994).
16. Very briefly, critical theorists unequivocally acknowledge the power of the business elite: their argument collapses without this posit. Developmental theorists also rely on the human resources of industrial capitalism to direct the process of sustainable development: human agency is a necessity. Functionalists, whose modus operandi is the amelioration of market place dysfunction, rely on humans to devise and implement corrective strategies. And ethico-theological theorists appeal directly to the meaning of life: all human beings recognise that they do not live by bread alone.
17. *Changing Course*, executive summary, p.20. The BCSO also glimpses, although it fails to realise in any effective plan, a key principle: "The only way forward is to 'decouple' economic growth from environmental impact." (40)
18. Compare Norman Myers, "Biodepletion," in Paehlke, ed., *Conservation*, 77-80.
19. This point rests on the uncertain assumption that humankind can survive in such a biologically impoverished world; no one knows what the consequences of such destruction would be in terms of biosystem services alone.
20. While corporate decision makers are typically conceptualised as rational economic actors attempting to optimise rate of return on investment, they are also biophysical members of the larger community of life on Earth. Some have conceptualised "the profit motive" as a neurotic denial of corporeal being, particularly as being the expression of a masculine ego determined to control and thus overcome the mutable biophysical world. Clearly, the profit motive can be interpreted as constrained by "egoic consciousness" locked into a closed system of (neo-classical) thought that legitimates "rational decision making."

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