V. Growth: Anatomy of a Panacea

Richard Jolly, author of the United Nations Development Program's Human Development Report of 1996, points out that there are five types of growth that give people less and not more. Unfortunately, these tend to be the present major types of growth. They are:

- Jobless growth, where the overall economy grows, but does not expand opportunities for employment.
- Ruthless growth, where the fruits of economic growth mostly benefit the rich.
- Voiceless growth, where economic growth is not matched by democracy or individual empowerment.
- Rootless growth, where cultural identity withers as the economy grows.
- Futureless growth, where economic growth consumes its very foundations, squandering resources needed for future generations.

A. The Poor Need It (Like a Hole in the Head)

Any mention of the need to end growth elicits protests that this would condemn the poor to perpetual deprivation. Ironically, the argument that the well-being of the poor depends on economic growth comes mainly from professional development workers, economists, financiers, corporation heads, and others who have no problem putting food on their tables. When the poor speak for themselves, they more often talk of secure rights to the land and waters on which they live and from which they obtain their livelihoods. They seek decent jobs that pay a living wage. They want health care and education for their children.

Policies that favor economic expansion commonly shift income and assets to those who own property at the expense of those who depend on their labor for their livelihood. Although growth itself does not necessarily cause poverty, the policies advanced in its name often do. Per David Korten [2], the following policy outcomes are typically associated with economic growth:

- Increasing the rate of depletion of natural resources provides financial gains for the economically powerful at the expense of people whose livelihood base is disrupted.
- Shifting activities from the social (non-money) economy to the money economy increases the dependence of the working classes on money and thereby on those who own assets, provide professional services, and control access to jobs.
- Shifting control of agricultural lands, forests, and fisheries from those engaged in creating subsistence livelihoods to property owners engaged in investing for profit adds to measured economic output, redistributes the ownership of these assets to the capital-owning classes, expands the pool of low-cost wage labor, and pushes wages downward.

Korten illustrates this with a story from the Philippines

> "For centuries, the indigenous Igorot ("people of the mountains") of Benguet province, Philippines, have engaged in small-scale "pocket mining" of the rich gold veins found on their ancestral lands. The men dig small round caves into the mountain. Women and children hammer the gold-bearing rocks into nuggets the size of corn kernels. Their lands are now dominated by huge open-pit mines operated by the Benguet Corporation – owned in approximately equal shares by wealthy Filipinos, the Philippine government, and U.S. investors – to produce gold for export. Dozens of bulldozers, cranes, and trucks cut deep gashes into the mountain, stripping away the trees and topsoil and dumping enormous piles of rocky waste into the riverbeds. The local people tell visitors how, with their water sources destroyed, they can no longer grow rice and bananas and must go to the other side of the mountain for water to drink and bathe. Even their own mining grounds are threatened, their rights ignored.

> Instead of using water to separate the gold from the rock, as the Igorot do, the mining company uses toxic chemicals, including cyanide compounds, and flushes them down the river, poisoning the water and killing the cattle that drink it. Downstream, rice farmers in the affected area of Pangasinan province are losing an estimated 250 million pesos a year as the mine tailings cover their irrigated fields and cause sharp declines in yields, resulting in a net population exodus. Still farther on, fisherfolk in the gulf report substantial reductions in their catch as tailings smother the coral reefs. It's good for growth. Benguet and the other major mining companies involved earn combined net profits of 1.1 billion pesos a year – a massive resource transfer from the poor to the rich. Countless such stories are told wherever mining companies operate."

As opportunities for industrial employment have declined in high-income countries, economists have looked to the service economy to pick up the slack. Little note is taken of the fact that much of the expansion of the service economy results from appropriating the services originally performed by households and communities. Providing these real services once productively engaged more than half the working hours of the adult population, mostly women, in meeting many of the basic needs of families and carrying out the countless neighborly functions essential to the maintenance of healthy, caring communities. As productive and reproductive functions such as child care, health care, food preparation, entertainment, and physical security are transferred from the social economy to the market economy, they show up as additions to economic output and thus contributors to economic growth – though they do little, if anything, to improve the quality of the services we receive.

B. Gross National Product (GNP): It's Grosser Than You Think

It's like taking your paycheck, then adding all your bills to it, and saying that the bigger this total is, the better off you are. Do you really run your business or your family finances that way? The GNP has been the touchstone of economic policy for so long that most Americans probably regard it as a kind of universal standard. Actually the GNP is just an artifact of history, a relic of another era. It grew out of the challenges of the Depression and the Second World War, when the nation faced economic realities very different from today's. As Herman Daly [1] points out:

> "We might say that GNP, technically a measure of the rate at which money is flowing through the economy, might also be described as a ***measure of the rate at which we are turning resources into garbage***."

A major portion of what shows up as growth in GDP is a result of:

- Shifting activities from the non-money social economy of household and community to the money economy-with the consequent erosion of social capital;
- Depleting natural resources stocks - such as forests, fisheries, and oil and mineral reserves - at far above their recovery rates (much of present our income is derived from liquidation of natural capital); and
- Counting as income the costs of defending ourselves against the consequences of growth, such as disposing of waste, cleaning up toxic dumps and oil spills, providing health care for victims of environmentally caused illnesses, rebuilding after floods resulting from human activities such as deforestation, and financing pollution-control devices.

1. Gross Domestic Product (GDP): Are You a Conspiracy Theorist?

In a groundbreaking study of Indonesia in 1989, the World Resources Institute, of Washington, D.C., explored the implications of growth for natural resources. Since the 1970s Indonesia had been a success story for the conventional development school, achieving an exceptional growth rate of 7% a year. But such an amphetamine pace cannot be sustained forever. Indonesia was selling off precious nonrenewable mineral wealth. Clear-cutting its forests and exhausting its topsoil with intensive farming, it was in effect robbing the future to finance the current boom. After adding in these and other factors, the institute found that the country's real, sustainable growth rate was only about half the official rate. And that wasn't counting the

broader spectrum of environmental and social costs, e.g., Igorot people above, which would have brought the growth rate down even more.

Here was another warning for those disposed to heed it. Yet the international development establishment did nothing of the sort. In fact, what is being measured has grown more partisan than ever. Specifically, in 1991 the GNP was turned into the GDP - a quiet change that had very large implications.

Per Art Kleiner in Whole Earth Review [22]:

> "Under the old measure, the gross national product, the earnings of a multinational firm were attributed to the country where the firm was owned - and where the profits would eventually return. The GNP of a country measures national production, that which provides income to the citizens of that country, regardless of where that production occurs. The GDP measures production, that which occurs within the borders of a country, regardless of who owns the units of production. Under the gross domestic product the profits are attributed to the country where the factory or mine is located, *even though they won't stay there*. This accounting shift has turned many *struggling nations into statistical boomtowns*, while aiding the push for a global economy. Conveniently, it has hidden a basic fact: the nations of the North are walking off with the South's resources, and calling it a gain for the South."

2. The GDP Today: How Down Becomes Up

The following is from a seminal article, *If the GDP is Up, Why is America Down* [21], which introduced the concept of the Genuine Progress Indicator.

> "If the chief of your local police department were to announce today that "activity" on the city streets had increased by 15 %, people would not be impressed, reporters least of all. They would demand specifics. Exactly what increased? Tree planting or burglaries? Volunteerism or muggings? Car wrecks or neighborly acts of kindness? The mere quantity of activity, taken alone, says virtually nothing about whether life on the streets is getting better or worse. The economy is the same way. "Less" or "more" means very little unless you know of what. Yet somehow the GDP manages to induce a kind of collective stupor in which such basic questions rarely get asked.
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> By itself the GDP tells very little. Simply a measure of total output (the dollar value of finished goods and services), it assumes that everything produced is by definition "goods." It does not distinguish between costs and benefits, between productive and destructive activities, or between sustainable and unsustainable ones. The nation's central measure of well being works like a calculating machine that adds but cannot subtract. It treats everything that happens in the market as a gain for humanity, while ignoring everything that happens outside the realm of monetized exchange, regardless of the importance to well-being.
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> *By the curious standard of the GDP, the nation's economic hero is a terminal cancer patient who is going through a costly divorce.* The happiest event is an earthquake or a hurricane. The most desirable habitat is a multibillion-dollar Superfund site. All these add to the GDP, because they cause money to change hands. It is as if a business kept a balance sheet by merely adding up all "transactions," without distinguishing between income and expenses, or between assets and liabilities.
>
> The perversity of the GDP affects virtually all parts of society. In 1993 William J. Bennett, who had been the Secretary of Education in the Reagan Administration, produced a study of social decline. He called it "The Index of Leading Cultural Indicators," a deliberate counterpoint to the Commerce Department's similarly named regular economic report. His objective was to detail the social erosion that has continued even as the nation's economic indicators have gone up.

The strange fact that jumps out from Bennett's grim inventory of crime, divorce, mass-media addiction, and the rest is that much of it actually adds to the GDP. Growth can be social decline by another name. Divorce, for example, adds a small fortune in lawyers' bills, the need for second households, transportation and counseling for kids, and so on. Divorce lawyers alone take in probably several billion dollars a year, and possibly a good deal more. Divorce also provides a major boost for the real-estate industry. "Unfortunately, divorce is a big part of our business. It means one [home] to sell and sometimes two to buy," a realtor in suburban Chicago told the Chicago Tribune. Similarly, crime has given rise to a burgeoning crime-prevention and security industry with revenues of more than $65 billion a year. The car-locking device called The Club adds some $100 million a year to the GDP all by itself, without counting knock-offs. Even a gruesome event like the Oklahoma City bombing becomes an economic uptick by the strange reckonings of the GDP. "Analysts expect the share prices [of firms making anti-crime equipment] to gain during the next several months," The Wall Street Journal reported a short time after the bombing, "as safety concerns translate into more contracts."

Bennett cited the chilling statistics that teenagers spend on average some three hours a day watching television, and about five minutes a day alone with their fathers. Yet when kids are talking with their parents, they aren't adding to the GDP. In contrast, MTV helps turn them into ardent, GDP-enhancing consumers. Even those unwed teenage mothers are bringing new little consumers into the world (where they will quickly join the "kiddie market" and after that the "teen market," which together influence more than $200 billion in GDP). So while social conservatives like Bennett are rightly deploring the nation's social decline, their free-marketeer counterparts are looking at the same phenomena through the lens of the GDP and breaking out the champagne.

Something similar happens with the natural habitat. The more the nation depletes its natural resources, the more the GDP increases. This violates basic accounting principles, in that it portrays the depletion of capital as current income. No businessperson would make such a fundamental error. When a small oil company drains an oil well in Texas, it gets a generous depletion allowance on its taxes, in recognition of the loss. Yet that very same drainage shows up as a gain to the nation in the GDP. When the United States fishes its cod populations down to remnants, this appears on the national books as an economic boom--until the fisheries collapse. As the former World Bank economist Herman Daly puts it, the current national accounting system *treats the earth as a business in liquidation*.

Add pollution to the balance sheet and we appear to be doing even better. In fact, pollution shows up twice as a gain: once when the chemical factory, say, produces it as a by-product, and again when the nation spends billions of dollars to clean up the toxic Superfund site that results. Furthermore, the extra costs that come as a consequence of that environmental depletion and degradation - such as medical bills arising from dirty air - also show up as growth in the GDP. This kind of accounting feeds the notion that conserving resources and protecting the natural habitat must come at the expense of the economy, because the result can be a lower GDP. That is a lot like saying that a reserve for capital depreciation must come at the expense of the business. On the contrary, a capital reserve is essential to ensure the future of the business. To ignore that is to confuse mere borrowing from the future with actual profit. Resource conservation works the same way, but the perverse accounting of the GDP hides this basic fact.

No less important is the way the GDP ignores the contribution of the social realm - that is, the economic role of households and communities. This is where much of the nation's most important work gets done, from caring for children and older people to volunteer work in its many forms. It is the nation's social glue. Yet because no money changes hands in this realm, it is invisible to conventional economics. The GDP doesn't count it at all - which means that the more our families

and communities decline, and a monetized service sector takes their place, the more the GDP goes up and the economic pundits cheer.

Parenting becomes child care, visits on the porch become psychiatry and VCRs, the watchful eyes of neighbors become alarm systems and police officers, the kitchen table becomes McDonald's--up and down the line, the things people used to do for and with one another turn into things they have to buy. Day care adds more than $4 billion to the GDP; VCRs and kindred entertainment gear add almost $60 billion. Politicians generally see this decay through a well-worn ideological lens: conservatives root for the market, liberals for the government. But in fact these two "sectors" are, in this respect at least, merely different sides of the same coin: both government and the private market grow by cannibalizing the family and community realms that ultimately nurture and sustain us.

These are just the more obvious problems. There are others, no less severe. The GDP totally ignores the distribution of income, for example, so that enormous gains at the top - as were made during the 1980s - appear as new bounty for all. It makes no distinction between the person in the secure high-tech job and the "downsized" white-collar worker who has to work two jobs at lower pay. The GDP treats leisure time and time with family the way it treats air and water: as having no value at all. When the need for a second job cuts the time available for family or community, the GDP records this loss as an economic gain.

Then there's the question of addictive consumption. Free-market fundamentalists are inclined to attack critics of the GDP as "elitists." People buy things because they want them, they say, and who knows better than the people themselves what adds to well-being? It makes a good one liner. But is the truth really so simple? Some 40 percent of the nation's drinking exceeds the level of "moderation," defined as two drinks a day. Credit-card abuse has become so pervasive that local chapters of Debtors Anonymous hold forty-five meetings a week in the San Francisco Bay area alone. Close to 50 percent of Americans consider themselves overweight. When one considers the $32 billion diet industry, the GDP becomes truly bizarre. It counts the food that people wish they didn't eat, and then the billions they spend to lose the added pounds that result. The coronary bypass patient becomes almost a metaphor for the nation's measure of progress: shovel in the fat, pay the consequences, add the two together, and the economy grows some more.

So, too, the O. J. Simpson trial. When The Wall Street Journal added up the Simpson legal team ($20,000 a day), network-news expenses, O. J. statuettes, and the rest, it got a total of about $200 million in new GDP, for which politicians will be taking credit in 1996. "GDP of O.J. Trial Outruns the Total of, Say, Grenada," the Journal's headline writer proclaimed. One begins to understand why politicians prefer to talk about growth rather than what it actually consists of, and why Prozac alone adds more than $1.2 billion to the GDP, as people try to feel a little better amid all this progress."

3. GDP as Cough Index: The Heisenberg Principle of Mismeasurement.

Herman Daly [1] gives a dark humor example to describe GDP and the perverse results of the Law of Unintended Consequences as applied to measurements:

"The act of measurement always involves some interaction and interference with the reality being measured. This generalized Heisenberg uncertainty principle is especially relevant in economics, where the measurement of a success index on which rewards are based, or taxes calculated, nearly always has perverse repercussions on the reality being measured. Consider, for example, the case of management by quantified objectives applied to a tuberculosis hospital, as related to me by a physician. It is well known that TB patients cough less as they get better. So the number of coughs per day was taken as a quantitative measure of the patient's improvement. Small microphones were attached to the patients' beds, and their coughs were duly recorded and tabulated. The staff quickly

perceived that they were being evaluated in inverse proportion to the number of times their patients coughed. Coughing steadily declined as doses of codeine were more frequently prescribed. Relaxed patients cough less. Unfortunately, the patients got worse, precisely because they were not coughing up and spitting out the congestion. The cough index was abandoned."

The cough index totally subverted the activity it was designed to measure because people served the abstract quantitative index instead of the concrete qualitative goal of health. Perversities induced by quantitative goal setting are pervasive in the literature on Soviet planning: set the production quota for cloth in linear feet, and the bolt gets narrower; set it in square feet, and the cloth gets thinner; set it by weight, and it gets too thick. But Daly doesn't believe one needs to go as far away as the Soviet Union to find examples.

> "The phenomenon is ubiquitous. In universities a professor is rewarded according to number of publications. Consequently, the length of articles is becoming shorter as we approach the minimum publishable unit of research. At the same time the frequency of co-authors has increased. *More and more people are collaborating on shorter and shorter papers*. What is being maximized is not discovery and dissemination of coherent knowledge but the number of publications on which one's name appears."

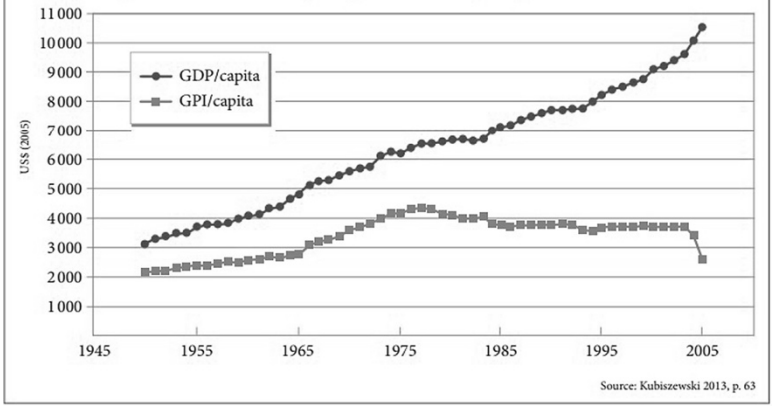
The purpose of these examples of the treachery of quantified success indexes is to suggest that, like them, GDP is not only a passive mismeasure *but also an actively distorting influence* on the very reality that it aims only to reflect. GDP is an index of throughput, not welfare. Throughput is positively correlated with welfare in a world of infinite sources and sinks, but in a finite world with fully employed carrying capacity, throughput is a *cost.* To design national policies to maximize GDP is just not smart. *It is practically equivalent to maximizing depletion and pollution*.

C. Genuine Progress Indicator (GPI): Cough Medicine

The Genuine Progress Indicator (GPI) developed by Redefining Progress of San Francisco is a new measure of the economic well-being of the nation from 1950 to 2000. It broadens the conventional accounting framework to include the economic contributions of the family and community realms, and of the natural habitat, along with conventionally measured economic production. The GPI takes into account more than twenty aspects of our economic lives that the GDP ignores. It includes estimates of the economic contribution of numerous social and environmental factors which the GDP dismisses with an implicit and arbitrary value of zero. It also differentiates between economic transactions that add to well-being and those which diminish it. The GPI then integrates these factors into a composite measure so that the benefits of economic activity can be weighed against the costs. The GPI is intended to provide citizens and policy-makers with a more accurate barometer of the overall health of the economy, and of how our national condition is changing over time.

Figure 1: Genuine progress splits from GDP in the 1970s

Genuine Progress Indicator (GPI) per capita and GDP per capita, 1950–2005



Source: Kubiszewski 2013, p. 63

While per capita GDP has more than doubled from 1950 to present, the GPI shows a very different picture. It increased during the 1950s and 1960s, but has declined by roughly 45% since 1970. Further, the rate of decline in per capita GPI has increased from an average of 1% in the 1970s to 2% in the 1980s to 6% so far in the 1990s. This wide and growing divergence between the GDP and GPI is a warning that the economy is stuck on a path that imposes large - and as yet unreckoned - costs onto the present and the future. The GPI strongly suggests that the costs of the nation's current economic trajectory have begun to outweigh the benefits, leading to growth that is actually uneconomic.

The GPI starts with the same personal consumption data the GDP is based on, but then makes some crucial distinctions. It adjusts for certain factors (such as income distribution), adds certain others (such as the value of household work and volunteer work), and subtracts yet others (such as the costs of crime and pollution). Because the GDP and the GPI are both measured in monetary terms, they can be compared on the same scale.

1. Crime & Family Breakdown

Social breakdown imposes large economic costs on individuals and society, in the form of legal fees, medical expenses, damage to property, and the like. The GDP treats such expenses as additions to well-being. By contrast, the GPI subtracts the costs arising from crime and divorce.

2. Household & Volunteer Work

Much of the most important work in society is done in household and community settings: childcare, home repairs, volunteer work, and the like. These contributions are ignored in the GDP because no money changes hands. To correct this omission, the GPI includes, among other things, the value of household work figured at the approximate cost of hiring someone to do it.

3. Income Distribution

A rising tide does not necessarily lift all boats -- not if the gap between the very rich and everyone else increases. Both economic theory and common sense tell us that the poor benefit more from a given increase in their income than do the rich. Accordingly, the GPI rises when the poor receive a larger percentage of national income, and falls when their share decreases.

4. Resource Depletion

If today's economic activity depletes the physical resource base available for tomorrow's, then it is not really creating well-being; rather, it is just borrowing it from future generations. The GDP counts such borrowing as current income. The GPI, by contrast, counts the depletion or degradation of wetlands, farmland, and non-renewable minerals (including oil) as a current cost.

5. Pollution

The GDP often counts pollution as a double gain; once when it's created, and then again when it is cleaned up. By contrast, the GPI subtracts the costs of air and water pollution as measured by actual damage to human health and the environment.

6. Long-Term Environmental Damage

Climate change and the management of nuclear wastes are two long-term costs arising from the use of fossil fuels and atomic energy. These costs do not show up in ordinary economic accounts. The same is true of the depletion of stratospheric ozone arising from the use of chlorofluorocarbons. For this reason, the GPI treats as costs the consumption of certain forms of energy and of ozone-depleting chemicals.

7. Changes In Leisure Time

As a nation increases in wealth, people should have increasing latitude to choose between more work and more free time for family or other activities. In recent years, however, the opposite has occurred. The GDP ignores this loss of free time, but the GPI treats leisure as most Americans do - as something of value. When leisure time increases, the GPI goes up; when Americans have less of it, the GPI goes down.

8. Defensive Expenditures

The GDP counts as additions to well-being the money people spend just to prevent erosion in their quality of life or to compensate for misfortunes of various kinds. Examples are the medical and repair bills from automobile accidents, commuting costs, and household expenditures on pollution control devices such as water filters. The GPI counts such "defensive" expenditures as most Americans do: as costs rather than as benefits.

9. Lifespan Of Consumer Durables & Public Infrastructure

The GDP confuses the value provided by major consumer purchases (e.g., home appliances) with the amounts Americans spend to buy them. This hides the loss in well-being that results when products are made to wear out quickly. To overcome this, the GPI treats the money spent on capital items as a cost, and the value of the service they provide year after year as a benefit. This applies both to private capital items and to public infrastructure, such as highways.

10. Dependence On Foreign Assets

If a nation allows its capital stock to decline, or if it finances its consumption out of borrowed capital, it is living beyond its means. The GPI counts net additions to the capital stock as contributions to well-being, and treats money borrowed from abroad as reductions. If the borrowed money is used for investment, the negative effects are canceled out. But if the borrowed money is used to finance consumption, the GPI declines.

D. Ethicosocial Limits: Does Your Conscience Bother You Yet?

Even when growth is, with enough ingenuity, still possible, ethicosocial limits may render it undesirable. Four ethicosocial propositions limiting the desirability of growth are briefly considered below and come from Daly [1].

1. The desirability of growth financed by the drawdown of geological capital is limited by the cost imposed on future generations.

In standard economics the balancing of future against present costs and benefits is done by discounting. A time discount rate (the interest rate paid for invested money) is a numerical way of expressing the value judgment that beyond a certain point the future is not worth anything to presently living people. The higher the discount rate, the sooner that point is reached. *The value of the future to future people does not count in the standard approach.*

Perhaps a more discriminating, though less numerical, principle for balancing the present and the future would be that the basic needs of the present should always take precedence over the basic needs of the future but that *the basic needs of the future should take precedence over the extravagant luxury of the present.*

2. The desirability of growth financed by takeover of habitat is limited by the extinction or reduction in number of sentient subhuman species whose habitat disappears.

Economic growth requires space for growing stocks of artifacts and people and for expanding sources of raw material and sinks for waste material. Other species also require space, their “place in the sun." The instrumental value of other species to us, the life-support services they provide, is enormous. Another limit derives from the intrinsic value of other species, that is, counting them as sentient, though probably not self-conscious, beings which experience pleasure and pain and whose experienced “utility" should be counted positively in welfare economies, even though it does not give rise to maximizing market behavior.

The intrinsic value of subhuman species should exert some limit on habitat takeover in addition to the limit arising from instrumental value. But it is extremely difficult to say how much. Clarification of this limit is a major philosophical task, but if we wait for a definitive answer before imposing any limits on takeover, then the question will be rendered moot by extinctions which are now occurring at an extremely rapid rate

relative to past ages. If we attribute intrinsic value in some degree to other sentient creatures, then the optimal scale of the human niche would be smaller than if only human sentience counted. Investment in natural capital would then have the additional benefit of increasing life-support services to non-human species whose enjoyment of life would no longer be counted as zero. *A person is worth many sparrows, but for that statement to mean anything a sparrow's worth cannot be zero*. But not even theology, much less economics, can say how many sparrows are worth a human.

3. **The desirability of aggregate growth is limited by its self-canceling effects on welfare.**

Keynes argued that absolute wants (those we feel independently of the condition of others) are not insatiable. Relative wants (those we feel only because their satisfaction makes us feel superior to others) are indeed insatiable, for, as Keynes put it, "The higher the general level, the higher still are they." Or, as J. S. Mill expressed it, 'Men do not desire to be rich, but to be richer than other men." At the current margin of production in rich countries it is very likely that welfare increments (increments in well-being) are largely a function of changes in relative income (insofar as they depend on income at all). Since the struggle for relative shares is a zero-sum game, it is clear that aggregate growth cannot increase aggregate welfare. To the extent that welfare depends on relative position, growth is unable to increase welfare in the aggregate. It is subject to the same kind of self-canceling trap that we find in the arms race.

4. **The desirability of aggregate growth is limited by the corrosive effects on moral standards resulting from the very attitudes that foster growth, such as glorification of self-interest and a scientistic-technocratic worldview.**

On the demand side of commodity markets, growth is stimulated by greed and acquisitiveness, intensified by the multibillion-dollar advertising industry. On the supply side, technocratic scientism proclaims the possibility of limitless expansion and preaches a reductionist, mechanistic philosophy which, in spite of its success as a research program, has serious shortcomings as a worldview. As a research program it very effectively furthers power and control, but as a worldview it leaves no room for purpose, much less for any distinction between good and bad purposes. Anything goes is a convenient moral slogan for the growth economy because it implies that anything also sells. To the extent that growth has a well-defined purpose, then it is limited by the satisfaction of that purpose. Expanding power and shrinking purpose lead to uncontrolled growth for its own sake, which is wrecking the moral and social order just as surely as it is wrecking the ecological order.