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Questioning Sustainable Development

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Abstract:

The paper proposes a theoretical discussion of the concept of sustainable development from a critical point of view. It presents and organizes different kinds of critiques that can be addressed to sustainable development. They can be articulated on the lack of precision in the concept but also on directly theoretical issues, both from a mainstream point of view and from a heterodox point of view. We also discuss some moral and anthropological issues in that notion.

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If we were to establish a ranking in the contemporary social and political vocabulary, it is no doubt that the expression “sustainable development” would be very well placed, maybe at the top of the charts. [Jollivet, 2001]

The notion of ecological development appeared in 1972 with the United Nations Conference in Stockholm, and the issue of sustainable development was first used in 1987 in the Bruntland report, as a “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*” [United Nations, 1987]. The issue was further elaborated in Rio Conference: “*The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations*” [United Nations, 1992].

Yet many critiques appeared to the issue of sustainable development, and these critiques came from a huge range of theoretical standpoints: Marxists, reformists, ecologists, social-democrats, classical economists... This paper aims to introduce those critiques and to rank them according to different standards. First, the paper will present the critics that bear on issues related to ambiguous character of the concept (I). Then it will discuss the critics that are based on theoretical differences, first, first with rather orthodox or mainstream critiques (II), and then with heterodox critiques (III). We finish with critiques that are based on moral or anthropological standards (IV).

I. Critique on the vague character of the concept of sustainable development

Our present point is that the notion of sustainable development did not stabilize its content, and it is an ambiguous and multi-shaped concept. Until now, it has not appeared a clear and definitive definition of the notion of sustainable development, of the objectives that this concept aims to and of the means to achieve it. For the most, this concept is interrogating the possibility of a consistency between, on the one hand, a defense of environment and, on the other hand, the mainstream economic approach: On which rationality is it based? Is the relation between economic development, on the one hand, and environmental preservation and social equity on the other hand, rather complementary or substitutable? We will present critiques on the ambiguous character of the notion itself (I.1), and then of the objectives (I.2).

I.1. On the concept itself

One reason to oppose the notion of sustainable development is that it is quite difficult to oppose it, since the expression can cover many different meanings, so that one can chose which her favourite meaning is. This means mainly that the notion is not very useful. Roughly, either we favour development, which is what has been done until now, but we do it in a sustainable way, or we defend sustainability, which allows us to question the various effects of development such as it has been practiced until now, that is in such a way which is bad for environment and for social equity. The notion of development itself is quite obscure, since it is hard to know if it corresponds to economic development or to economic growth, and we can wonder if it is necessary to gradually separate growth from development.

We can wonder if the issue of sustainable development is a contradiction in terms, and if so, if such contradictions can be solved or not. It can be true that, on a planet where 20% of the population is consuming 80% of the resources, no development can be sustainable. Besides, if we assume that sustainable development is the way of reconciling economic growth with preservation of environment and with social equity, and if we admit that economic growth necessarily produces additional pollution, we face a major contradiction [Latouche, 2006].

Since unanimity is suspect, since we cannot seriously be against totally general consensual objectives as some new catechism, we can wonder if this notion is rather

some kind of marketing pack. Actually, sustainable development is so imprecise that it can be used by the huge firms, including the ones which are polluting the most.

Now, it happens that the best guarantee for a non marketing-type sustainable development is the existence of official labels, like Biological Agriculture in food. Still, it is necessary to keep cautious with these labels are covering, since their content should be lowered, which is what happens today. This means that the consumers must be involved in the definition, the implementation and the control of those labels, which will more efficient if the production and distribution processes are rather short.

Yet we have a large deal of diversity within the type of players involved, their principles and their interests, as we can check with the definition of sustainable development which was given by Michel Fabiani [2001, personal translation], the chairman of British Petroleum: *“First, sustainable development is the production of more energy, more oil, more gas, more coal and more nuclear power, and certainly more renewable energies. At the same time, we must make sure that this not damages environment”*.

What this means is more pollution together with a protection of environment... this is one of the paradoxes to which the issue of sustainable development leads. We all know that sustainable development became an opportunity for the firms to win some market shares, without spending much money, in presenting themselves with sustainable development slogans. For example, EDF (electricity) claims that nuclear energy allows a fall in the direct rejection of greenhouse gas; Monsanto (agro-chemistry) claims that some of its genetically modified plants allows it to avoid pesticide spreading. We easily can find hundreds of examples like this.

I.2. On the objectives

A critique can be made on each of the three proclaimed objectives of sustainable environment: welfare, environment and equity.

First we cannot define precisely what the welfare of current generations is, and then we cannot specify how much resources this means. Are our needs satisfied if each of us is living in 10 m², or will it be the case when each human being will have 150 m² with heating plus a private sauna... ? Are our needs satisfied if everyone has 0.5 tonne of oil equivalent in energy (which is roughly the Indian level), or rather are 7 tonnes of oil equivalent per head (US level) that correspond to such a satisfaction?

Does each need to take plane once or fifty times in our life, or not at all? Do we need to eat 20 kilograms of meat per year, or do we rather need 100 kilograms? Do we need one or ten presents for each of our birthday? Do we need zero, one, two or more cars per household? We have to admit that the notion of need itself, beyond subsistence on which an agreement might be found (food, drink, sleep, protection against cold and against predators, reproduction of the species) does not correspond to a precise amount of consumption: the definition that states sustainable development does not give any precise objective or limit to what is the aim of sustainable development, which turns it useless. Also, it can be the case that individual needs and collective needs are perfectly antagonistic, and the concept “sustainable development” gives no answer for solving that conflict. For instance, for economic and social reasons, it might be the case that everyone should have the right to drive a car, but for environmental reasons, we also need to produce less gaz à effet de serre, and it is hard to achieve that in the current situation. What is the standard for choosing between the two in the statement for sustainable development?

In terms of environment, even if the figures are hard to display, they still have an objective meaning: space occupations, water and energy consumption, number of living animals, raining days per year can be measured, and one hectare is the same for all. This means that it is possible to have a common language exists, and that a unique objective can be defined. For instance that no more than a precise number of tons CO₂ can be spread per person per year, or that no more than a certain number of tons of fishes cannot be fished. Actually, in terms of interaction between humanity and the physical world, it can be defined what it means to be sustainable, or rather what it means not to be sustainable: any behavior which is closely dependent on any kind of resources who may not be available in less than a few decades is not sustainable.

Now, how to measure and how to define what is sustainable in social terms? Social inequalities surely can last forever, and history has proved it: they exist since the origin of humanity, and I never heard of any instance: inequalities have been existing since the origin of humanity; in the world history, no perfect equality ever existed between community members, either animals or human beings, but it did not prevent “sustainability” to obtain. In terms of equity, the problem persists: does a fair society implies that no child works before eight, or that no child has a painful job to do? Does

it imply that, the wage difference between a worker and a CEO is one to ten, or one to a hundred? Which is the standard?

II. Mainstream optimistic critiques

These critiques are based on optimism on development from a pro-capitalist point of view, and such optimism is based on a double trust, on the one hand in economic growth (II.1) and on the other hand on science improvements (II.2).

II.1. Trust in economic growth

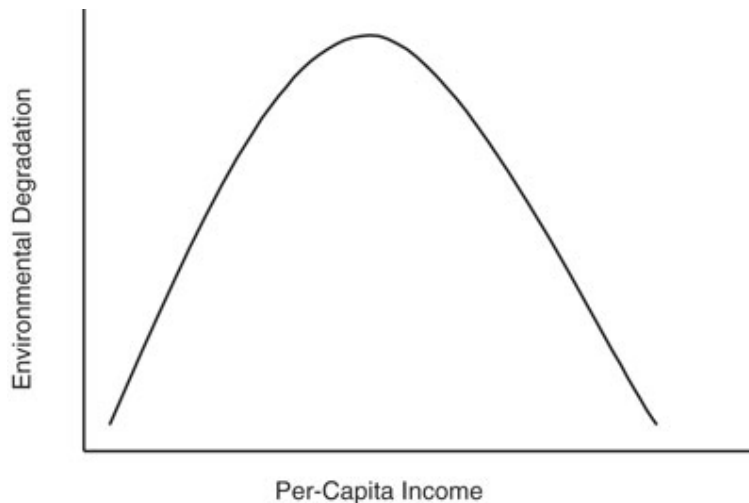
Such a view has started from the confidence that economists like Adam Smith have in the assumption that economic growth leads to a growth of population as supplemental to economy. Economic growth would create wealth, employment, an improvement of living standards, and it has proved to be the necessary condition for social improvement and stability.

Since some of the critiques of capitalism think that growth leads to the extinction of some kind of productions, or at least to the fall in their number, those who develop that optimistic critique of sustainable development think that capitalism, or the market², allows to decide the nature of production on more abundant resources, since market prices would give a sign whether a resource would become rare.

Other critiques think that economic growth has two contradictory effects. Still, the increase in production leads to an increase in pollution. Yet it also allows to make the citizens richer, so that they would better care of environment as a superior good (namely, environmental regulations are more restricting in the rich democratic countries), it produces additional income that can be allocated to the protection of environment, it allows to widespread new technologies that permit a better use of economic resources and, under the pressure of citizen consumers, firms will finally require measures for the protection of environment such it is necessary for their own activities to succeed.

The defenders of growth use the concept of environmental curve, on the model of the curve developed by Kuznets on social inequalities. On the basis of empirical study, it would be possible to claim that some pollution data show a reverse U. For instance, the pollution of atmosphere in some regions in Europe increased when the industrial revolution started, and it decreased after the factories closed.

² There is no consensus whether capitalism or market is to be condemned/



We just can remind here that the Kuznets curve represents the level of inequality in function of the level of development of a community (a region, a country...), the latter being supposed in an increasing trend in time. In the first stages of development, at a time when investment in infrastructure and in natural capital is the main incentive for growth, inequalities are encouraging growth in distributing more resources to the people who save and invest the most. On the contrary, in the most advanced countries, the increase in human capital replaces the increase in physical capital as a source of growth. In limiting the general level of education, inequalities lead to a decrease in economic growth, since everybody is not able to receive the necessary education.

In the environmental Kuznets curve, pollution has replaced inequalities. For instance, the advocates of an informational society consider that humanity entered a new technological period, and that now, thanks to computer science and to communication, it is possible to create wealth, that is growth, in producing services and information. Such an “intangible” production is considered as non-polluting, and it allows some thinkers, like Joël de Rosnay [2006] or Bernard Benhamou [2005], to claim that it is perfectly possible to generate growth without producing any waste which would create damage for environment.

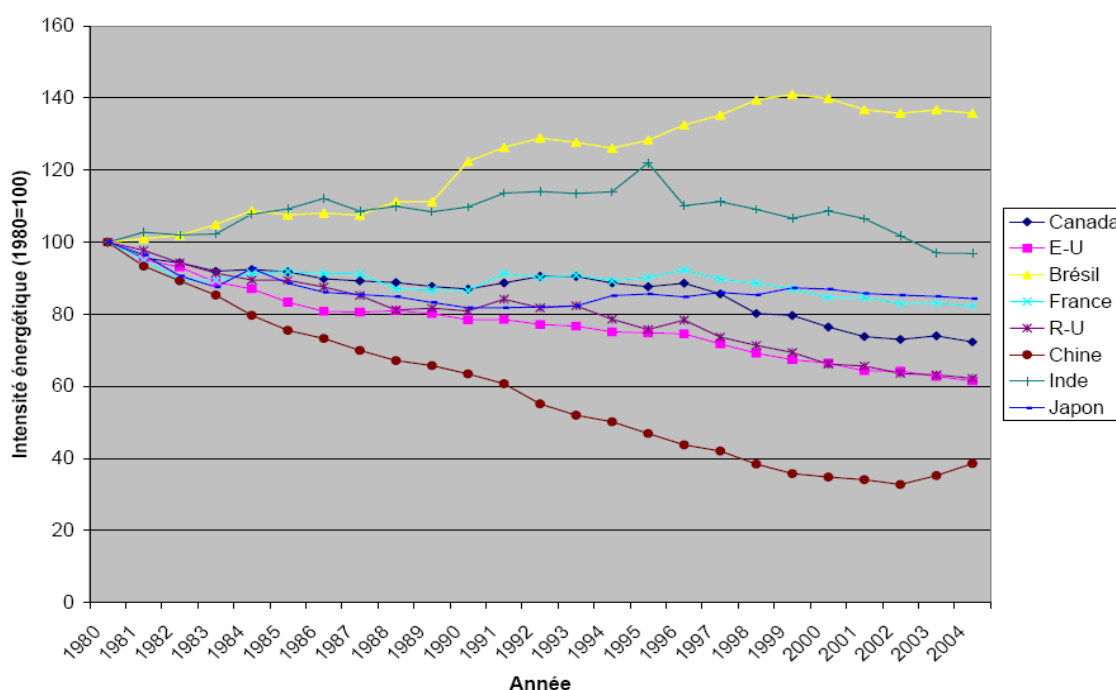
Yet, this theory of Kuznets environmental curve is quite controversial and it regularly put into question. A great majority of the experts agree that the assumption of the Kuznets environmental curve is only true for some polluting productions that are located in certain geographical areas. Also, if some kinds of pollutions can be very

fluctuating, the disappearance of some plants or animal species is completely irreversible and allows no U curve, reversed or not.

Still, the assumption on which a trust in economic growth rests is the possibility of a clean growth in environmental terms.

II. 2. Trust in science

The assumption behind this proposal is that technical improvement will solve the issues on energy, waste, rare raw materials... It is based on the Enlightenment spirit through the construction of an optimistic view of scientific research. For example, in the last twenty years, the energy intensity has seriously dropped



These views may be based on different assumptions. One of them is based on the Schumpeterian theory of “creative destruction”, and it claims that a critique of sustainable development can be based on sustainable development. This implies that it is possible to produce more in using less and less energy or raw materials, and in not replacing labour force by machines.

Technique and scientific improvement would then allow producing more with less means, including in the production of services. An example is the replacement of telegraphic cables by communication satellites. By the way, a counter-argument

would be that the initial development and the exploitation of a satellite would correspond to kilometers in cables.

It might be the case that activities in research and development in nuclear energy could provide some solutions in order to face the likely lack of oil. On a longer term, the supporters of nuclear energy predict that some nuclear reactors provide energy which cannot be exhausted and which is less polluting.

This is what is called the creative destruction, namely that in the process of their disappearance, some sectors allow the creation of new economic activities. This expression is closely related to the economist Joseph Schumpeter, who developed this idea in 1911 in *The Theory of Economic Development*: any technological innovation leads to a process of creative destruction.

Another critique is based on the forecast that the energetic resources will get exhausted. It happens that, in the past, some forecasts on the exhaustion of resources have proved to be wrong. For instance, as soon as 1914, the United States Bureau of Mines did estimate that the future production of oil was limited to 5.7 millions of barrels, which roughly corresponds to ten years of consumption. In 1972, the Meadows report did forecast that some irreplaceable resources will be completely exhausted before the end of the century. For Daniel Yergin [2007], an American specialist on energy, "*the world is far from lacking oil*", thanks to world reserves and to technological improvement. Nevertheless, the geologist Marion King Hubbert, who studied the phenomenon of oil peak, and who gave his name to the Hubbert Peak, was announcing in 1956, a relative fall in oil would start in 1970 in the United States. In the same period, many oil producing countries reached their maximal production possibilities, and the car constructors are trying to elaborate cars that are working on alternatives sources of energy.

III. Heterodox and anti-capitalist critiques

Serge Latouche claimed that *“a critique of development and of growth implies to question capitalism”* [2004]. One of the most basic critiques of capitalism, namely Karl Marx, was in a certain sense an advocate of sustainable development, since he was a strong critique of the alienation in class society and he was in favor of a “desalienation” of production in favor of human development. The kind of critiques of some interpretation of sustainable development which will be presented here will be a classical argument against the Malthusian view (III.1), the assumption that men and nature are complementary (III.2), the idea that has to be changed is first the nature of the relations of production (III.3). We will then present the possibility to oppose, or to reconcile Marxism with ecology (III.4)

III.1. Standard anti-Malthusian argument

In his famous *An Essay on the Principle of Population* [1798], Malthus claims that the trend of growth of a population is always slower than the trend of growth of natural resources and that *“the power of population is so superior to the power of the earth to produce subsistence for man, that premature death must in some shape or other visit the human race”* or that

a man who is born into a world already possessed, if he cannot get subsistence from his parents on whom he has just demand, and if the society do not want his labour, has no claim of right to the smallest portion of food, and, in fact, has no business to be where he is. At nature’s mighty feast there is no vacant cover for him. She tells him to be gone, and will quickly execute her own orders, if he do not work upon the compassion of some of her guests”.³

All of this is quite a hard version of Ricardo’s law of diminishing returns, except that Ricardo was in favor of free trade, and Malthus not. Economic Malthusianism is known as *“the attitudes or practices that rest on the voluntary drop in production”*⁴. The concept of a Malthusian demographic trap has been developed by Harvey Leibenstein in the 1950s: the growth of population faces the limited character of subsistence in less advanced countries which, due to the insufficiency food, do not succeed in going out from underdevelopment, because of insufficient savings and productivity of labor.

³ This only appears in the 1803 edition.

⁴ *Dictionnaire d’Économie et de sciences sociales*, Hatier, p.490.

The Club of Rome gives a version of Malthus for the second half of the twentieth century:

If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next 100 years.
[Meadows, 1972]

The critique that the Marxists produce against the arguments for a limitation of resources takes us back to the controversy between Marx and Engels on the one hand, and Malthus on the other hand. For the latter, a (too) strong increase in population would endanger the common prosperity, and for that reason, he was accusing the poor families, since they the largest fraction of the population. Yet, it can be replied to him that, for the population to control its own increase, a land reform or a better education are much more efficient than a stigmatization of the poor.

For Karl Marx, *“an abstract law of population exists for plants and animals only, and in so far as man has not interfered with them”* [Marx, 1970: 631- 632]. For men, only historical laws exist, that are not independent of forms of production. Anecdotally, Marx charged Malthus from being one of the most fervent supporters of the land-owners, on the name of the British church.

III.2. The complementary character of men and nature

Blaise Pascal said that the human race is only a part of the Nature, but that it is the only part that can understand Nature, and that he is the only person responsible of Nature, and that he only can transform it, for the best and for the worst.

For that reason, Marx was much preoccupied by the fact that capitalism tended to destroy the main sources of wealth. *We see, then, that labour is not the only source of material wealth, of use values produced by labour. As William Petty puts it, labour is its father and the earth its mother* [Marx, 1970]. The issue is the relation between human kind and nature, and more precisely the double relation between the humans (relations of production) and of the humans with the nature (productive forces). Marx does not oppose labour and nature, and labour is a process in which both men and nature are part: it is the condition of the interaction between man and nature, and the condition of human life.

III.3. Changing the relations of production for preserving nature

The ecological crisis is consubstantial to the crisis of capitalism, both of which make the world less and less sustainable. Therefore the stake is not to come out from the economy (changing the productive forces) but to come out from capitalism (changing the relations of production). This means that the capitalist alienation does not only concerns human labour, but also natural forces and scientific knowledge. Science, nature and the products of labour, to a large extent, are used as means for getting surplus-value. It is possible to consider that nature and the control of production are crucial, not the absolute amount of what is produced. Therefore, the control of the strategy for growth will allow both a social and ecological development.

The nature of production is then strongly conditioned by the relations of production. Firms that are managed by workers would certainly be less environmentally destructive than capitalist societies, especially when the latter are owned by shareholders that are far from the point of production. It can be said that Marx is defending the primacy of productive forces, among which environment, to which the productive forces must adapt in transforming themselves, that is replacing the capitalist relations of production by new relations that preserve and develop the productive forces.

III.4. Marxism vs. ecologism?

This issue takes us back to the debate between Marxism and ecologism, but it goes beyond. Roughly, the debate runs as follows: the ecologists criticize the increase in the level of production, characterized by “productivism”, without necessarily criticizing capitalism, whereas the Marxists criticize the capitalist mode of production in itself, as structurally full of devastating features. The word “ecology” does not properly appear in Marx, since it was first used by Ernst Haeckel in 1866.

The fight of the Marxists for socialism is a fight for a viable environment, under two issues.

The first one is the responsibility of future society towards natural resources. The ownership of land by a few individuals is as absurd and inhuman than the ownership of a man by another man. This means that men are not the owners of the planet, but they are only the users and they must leave it in a good situation to the next

generation. It is necessary for the post-capitalist society to be able to use the natural resources in a responsible way, with an extension of the common ownership of land, that is the implementation of a more developed form of ownership. Real freedom will be able to achieve the harmonious unity between man and nature. For instance, Marx had the idea of using a part of the surplus labour in order to create *“or insurance funds to provide against accidents, dislocations caused by natural calamities, etc.”* [Marx, 1875].

The second issue is about the meaning to be given to free time, since society is loading a conscious control on its labour time. An increase in productivity leads to saving time and to a better satisfaction of primary needs, so that the free time can be used for artistic and intellectual activities for which the production is less dangerous for environment. The only way for the human beings to get preoccupied with the mastering of nature and so to become plainly human, through an improvement of their capabilities (Amartya Sen), is to go beyond the necessity to work for living. Then, an intrinsic unity between man and nature would lead to a unity between human sciences and natural sciences, and there would only be one science, namely the science of history, which is divided between history of nature and history of men.

Shorter labour time is a necessary condition for the intellectual development of individuals who then will be able to master the forces of nature and the social labour in an environmental and humanly rational way. Yet, being theoretically and practically conscious of the natural wealth is an eternal condition for production, free time and human existence. An increase in free time would reduce the pressure of production on nature, and an abolition of the contradiction between cities and countryside is a condition for the establishment of the commune.

L'abolition de la contradiction ville-campagne est une condition de la commune.

IV. Other types of critiques (moral et anthropological)

Sustainable development may appear as a return to Christian values of rigour and sacrifice.

Historically, it is a Western concept, and one of its effects is to extend the development on an extended basis, which is precisely explained by Serge Latouche. Therefore, the civilization of the car, the television and the mobile phone is not viewed as a logical necessary achievement of any human society. Saying it is a way for

the western white man to prove its ethnocentrism. Real existing development until now has only been the westernization of the world.

Many of the critiques of the concept are considering that this idea is advocated by the bourgeois classes in developed countries which, under the intent of protecting environment, actually wish to prevent the so-called underdeveloped countries to get the same economic path then Western countries. Yet, the sustainable development mainly criticizes the richest classes which, through their overconsumption, their pollution and their waste, directly endanger the most socially and economically fragile categories of the world population.

Conclusion

The concept of sustainable development poses a number of problems on many points, whether rhetoric, theoretical or moral, and it seems that this notion is hardly ready to be used for solving practical problems. Yet, the paper defends the idea that it is still possible to advocate a development of the productive forces with economic growth, social equity and protection of the environment, but this possibility depends on the nature on the economic structure.

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