Electronic Journal of Sociology (2007)
ISSN: 1198 3655

The deadlocks of the Western culture and the Amazon region

Marcílio de Freitas
mafreitas@uea.edu.br

"I? I believe in the man, in the humanity, and you?" - Anonym

Abstract

This article presents the tendencies of the socio-economic scenarios, which are projected for the future of humanity. The current deadlocks, which guide the present political processes, and which have the ecological sustainability paradigm as foundation, are emphasized. The controversies and uncertainties of the 21st. century, concerning the scientific processes and the educational policies on a worldwide scale, are, also, dealt with. Special attention is given to the current "armamentist wave" of the rich countries and to the ecological issue that permeates the economic and scientific mega-processes in a regional and planetary scale. Finally, several pictures illustrating the fast ecological depreciation of the planet and the accelerated process of pauperization of the peoples in the underdeveloped countries, unfolding itself into a growing asymmetrical and deformed economic globalization process are exposed.

Explanatory elements: new world contours

The exacerbated social inequality constitutes one of the main issues that is putting pressure on the foundations of the on-going systems of thoughts and of the civilizing processes. The speed with which capitalism intensifies the socioeconomic precariousness in the outlying regions hinders its own dynamics. The process of world pauperization represents a threat to the political and economic order.

The synthesis of the world social indicators in the year 2000 is an emblematic reference: 1.3 billion people have no access to drinking water; over 5 million people die annually due to diseases caused by polluted water; 1 billion people inhabit precarious dwellings; 100 million are homeless; 790 million people starve and they have no food safety; 2 billion people are anemic due to food insufficiency; 35.000 children die daily due to lack of food; 880 million

have no access to health services; 2.6 billion have no basic sanitation and 2 billion have no access to electricity. The morbidity of such a situation is further intensified when one considers that: 1.2 billion people live with less than 1 dollar a day; 1 billion people cannot satisfy their basic needs for consumption; more than 850 million are illiterate; 27% of school age children are out of school; 260 million have no access to primary education; 145 million people live outside of their countries; 900 million have precarious employment; 150 million are unemployed and 250 million children in school age are working.[1] This is a social picture that is being forged and crystallized by the globalization of the economic processes led by the economic conglomerate, and for the political hegemony of the developed countries in the Western world, especially the USA. On a world scale, 86% of the total private consumption is reserved for 20% of the human population (Unesco, 2000, p. 18), and the 15 main exporting countries in 2000, also, led by United States of North America (12.3%) were responsible for 71.8% of that year's world.[2]

The paradigms of science while agent of social promotion among the different peoples, of the economy while an integrated physical and human development mechanism and allied to the world aspirations for prosperity and dignity, and of politics as a process of construction of a freer, solidary, fraternal and human world are definitively put in check. The temporary disjunction among the scientific, economic and political processes and the organized society constitutes a barrier for the construction of an immediate solution.

The speed with which the economic conglomerates, allied with the technologies of information and of communication are articulated to each other and with the strategic sections of the media and of the economic and political establishment, consolidating positions and global alliances, and subverting individuals, groups of people, associations, unions, political parties, governments, States and blocks of countries hinders, disperses and brakes a chain reaction from the organized societies. The world was never so interlaced in its socioeconomic dynamics and, 'broken into compartments' in its civilizing humanism. The sustainability of the economic processes has never exhibited such a tragic social configuration.

Hours (2002, pp. 294-295) stresses that the ancient development politics have caused a major dilapidation in the natural and human resources of the Planet, and that the processes of colonialist pillages were not concerned with developing a systematic planning turned towards the replacement, maintenance and conservation of the stocks and of the improvement of those resources. Within this context, Hour warns that the creation and dissemination of the notion of sustainable development by the hegemonic governments and by the economic actors introduces the illusion of a rupture, since it fails to determine how and where said rupture takes place; he, further, emphasizes that the concept of sustainable development is lacking in meaning. In the limit, should the current correlation of political forces in world be maintained, it can be said that one intends to implement an orderly, systematic and global pillage process of the natural resources, unlike the disordered pillage, typical of the years 70's - 80's.

Hours, finally, emphasizes that the emergence of that new "planetary ideological actor" is a new form of global regulation by multilateral institutions, in which these political agents end up providing legitimacy to the hypocrisy and the false humanitarian morals, known to the current civilizing process. There is an ideological blackmail in the proposal of sustainable development, the fluidity of that notion demands a continuous postponement of structurally-

based decisions, and it corroborates towards the development of an appropriation/expropriation dialectics in terms of rights, assets, and lands, of uses and of the availability of global public assets for a better exploration of the poor. Sustainable development appears today, as the final stage of the pillage of the world or of its inhabitants, or, in a positive version, as a healthy commercial exploration of nature and of the human species.

The use of the notion of sustainable development as an instrument for global integration puts pressure, in different gradations, several contradictions, among which the following stands: the total submission of the political processes to the economic processes; the desire of the peoples from the rich countries not to have their life standards changed, eliminating the exacerbated consumerism and assuming a commitment for greater socioecological integration; the growing scientific and technological gap between the rich and poor countries; the crystallization of the control of communication and information networks by the world's financial elite; the growing disconnectedness between the operational aspects of the concept of sustainable development and the social demands of the populations lacking citizenship; the increase in the dispute among the ALCA countries, led by United States of America, the European Community and Japan, for a larger world economic insertion; the growth on the world's social inequality and to overall lack of control of societies over their destinies.

The main Institutions for the promotion of education, science and culture in the world have already already definitively engendered the notion of self-sustainability in the constructs and architectures of the matrices of their world politics regarding teaching and science. In general, the consensus among the participating experts in those forums, projects the scientific, economic and political tendencies in a fragmented way, and as an unfolding of cause and effect relationships. The civilizations, the people, the societies, the education in its widest form, the sciences, the arts, the ethics, the economies, the policies, the religions and the ecologies are treated in a isolated form and considered "mortises" of a financial carrousel that entraps us in a field of force, whose intensity is molded the circumstances historically put in place by the financial agents, economic conglomerates and hegemonic governments.

In the limit, the same capitalist, logical and historical foundations, on which the structural determination of the current exploration, accumulation and capital circulation scenarios is grounded, continue anchoring the lists, the agendass and the local, national, continental and world agreements projected for the 21th century. Incrusted and permeating that political contradiction, the ecological subject is imposed as a central axis of that new planetary geopolitical configuration.

The model of industrial and technological development of the hegemonic countries was conceived and established, having as fundament the exacerbated consumption and intensive use of natural resources, resulting in an environmental degradation that puts at risk the future existence of life on Earth. Nuclear technology, rural and urban pollution, acid rain and the greenhouse effect, the inadequate use of the waters, soils and the atmosphere, and the de-stabilization of the heat, hydrological and biogeochemical cycles, are problems with regional and global impacts, and that affect the social dynamics and the economic processes of all the peoples.

Dominique Bourg (2002, pp. 181-185) emphasizes that such ecological conjuncture presents four original characteristics: (1) its planetary range that hinders its political administration;

(2) the invisibility and intangibility of some dimensions of the ecological problems, as the destruction of the ozone layer, the increase in the greenhouse effect, the nuclear pollution and the chemical contamination of the animals and vegetables, are world issues, which are not directly accessible to the human senses. Science has been making the mediation of such large ecological issues with society. However, the great temporary inertia of environmental issues, together with the uncertainties and the lack of accurace of the the analytical models used in the environmental research works have been jeopardizing a more consistent and wide-ranging scientific prognostic, fact which has been generating doubts and a certain disbelief among members of society on the dimensions and the gravity of the ecological issue in the contemporary world. A significant part of the global society seems to believe in the possibility of building a similar solution for a "vaccine", or, for an "antidote", which will be able to immunize the planet against the ecological depreciation. They behave as if they were not part of the problem. (3) Bourg, then, goes on to identify the third characteristic as being that related to the unpredictable nature and the lack of control over several environmental problems generated by the industrial processes in ancient times the likes of the cases of the destruction of the ozone layer by the chlorinefluorinecarbonaceus, of the greenhouse effect due to the CO_2, and of the cancer due to the amianthus, a partially solved problem in France, and that is far from being solved in the poor countries; and finally, (4) Bourg stresses that political pragmatism fails to give priority to long-term environmental issues due to the small electoral return by that type of initiative.

The social actors who articulate the ecological issue with the economic and political processes have not yet succeeded in creating the necessary historical conditions for the emergence of an ampler human movement, capable of leading the construction of a more integrated and committed solution for the future of the planet eliminating all the already proven sources of environmental risk.

The growth of poverty worsens this socioecological situation. Projections show that 98% of the world illiterate population is found in the outlying countries (Unesco, 2000b). With an added aggravation: in general, the typical problems of the human misery accrue; constant immigrations, illiteracy, high birth taxes and unemployment, chronic malnutrition, lack of health and leisure, family and community disintegration, marginality, affectivity problems and absence of citizenship, these are all problems typical of of wide portion of those outlying populations.

The human misery continues being considered as if it were a choice rather than a relationship of a social construction. Historically, the market and the liberal policies of national governments have reproduced and recreated misery poverty in intensities and speeds, which best suit their specific interests. For Loïc Wacquant (1993, p. 274) "(...) Tool of struggle against poverty, the public force is transformed into a war machine against the poor."

Estimates indicate that the global use of energy increased by 70% in the last 25 years, and is projected to grow by 50% in the period from 1993 to 2010 (Reed and Rosa, 2001), with a worsening of several environmental problems, all of them connected to one another, in particular of the greenhouse effect – a phenomenon associated to globar warming – resulting from the emissions of carbon dioxide. Referential studies in 1990 have indicated that 97% of the CO_2 emitted by the industrialized Western countries is a result from the burning of goal, oil and gas for the generation of energy to fulfil the social needs of 25% of the world

population who lives in those nations. During this same period, this same population consumed about 80% of the energy produced in the planet.

The sources of CO_2 emission due to the burning of fossil fuels are distributed among the residential heating and the sector of services (15%), transportation (27%), industrial energy in general (57%) and others (1%). An additional source, whose emissions have been systematically increasing is constituted by the burning and deforestation in tropical regions, in particular in the African continent, in Southeast Asia and in the Amazon basin. The consequences of such projections for the future of the humankind are still unforeseeable.

The economic and political establishment pressed by the agroindustrial sector – the main segment that depends on fossil fuels (mineral coal, petroleum and natural gas) and the main sector responsible for the pollution in the soil, in the water and in the atmosphere, with impacts in all sections related to the human existence have failed to forward, with the speed and necessary efficiency, the proposals to stop the worsening of the environmental problems (Sagan, 1999). This same establishment, jointly with scientific and political groups positioned in strategic regions, develops a marketing methodology of aggregation of economic values to the biological, animal and vegetable products; in particular, the pharmacology and biotechnology and new materials industries seem to want "to gobble up the forests". They have never registered so many patents, in such a short period of time, in human history.

The development of the economic conglomerates of the rich countries continues being subsidized by the poor countries. Examples of this process: the pillages in the colonial period; the intensive exploration at degrading costs with the destruction of the natural resources (fossil, mineras, forest, marine and the genetic heritage) which continues to threaten the existence of several populations in those countries; the unequal conditions of the world trade that favors the exports of goods, without taking into account the social impacts, generated by the extraction or production; the intellectual expropriation and the use of the traditional knowledge of the native people by the agroindustry and the biotechnology, without the payment of the intellectual rights; the destruction of large stretches of land and of water sources for intensive agriculture, with production being destined to exports, and with serious threats to the alimentary safety and the cultural values of the native peoples; the worsening of the atmospheric pollution with prominence to the greenhouse effect and the destruction of the ozone layer by rich countries; and finally, the construction of nuclear weapons and chemical substances which put all humanking at risk (Lefetey, 2002, pp. 196-197).

The inventory on the world biodiversity has already identified about 1.75 million species in the Earth, of which 4.500 are animals; 10.000 are birds; 1.500 are amphibians and reptiles; 22.000 are fish; 270.000 are plants; 70.000 are fungi; 5.000 are viruses; 4.000 are bacteria; 400.000 are spineless species, not including insects; 960.000 are insects, of which, about 600.000 of them are beetles (Dallmeier, 2000, pp. 454-455). Specialists speculate that these projections represent less than 10% of the actual number of species in the planet, most in the oceans and in tropical regions, with more than 50% of them residing in pan-american Amazonia, in central Africa, in Southeast Asia and in areas of Australia.

With an accrued aggravation: the continuing disorderly occupation and the inadequate use of the tropical regions have caused a forest loss at the rate around 0,8% to 2,0% per year. For this projection, the specialists estimate a loss of up to 16 million genetic populations per

year, or put another way, the loss of a population at every 2 seconds. As far as species are concerned, a loss of 27.000 species per year is estimated, or one species at every 20 minutes (Purvis and Hector, 2000, p. 216). It is estimated that, on world scale, that 654 plant species and 484 animal species, of which 58 species of mammals and 115 species of birds have disappeared following the outset of the 17th century.

Despite the current policies of nature protection, the process of deterioration of the world biodiversity has been taken place at an increasing rate. The following causes are highlighlited: inadequate use of the soil and water; the commercial super-exploration of some species; the introduction of predatory species in certain ecosystems; the growing pollution of the soil, of water and atmosphere; the intensification of agriculture; the reordainment of territories and global climatic variations.

Several other factors, have also contribute to that process, among which: the accelerated demographic growth; the non-adapted and no-integrated economic development policies to local and regional environmental realities; the non-regulation of the right of access to natural resources, and the insufficiency of scientific knowledge on the regional and world ecological dynamics (Lévêque, 1995, pp. 77-87).

The large extensions of deforestations and burning in tropical regions play an important role in the worsening of such preoccupying situation.

The defense of nature has given rise to speeches, which comprise different ideological spectra: from the most radical to the most permeable. In the forefront therea re the NGOs that defend a rigorous protection of nature, with the creation of natural reservations, more rigidity and agility in the application of the laws and of the environmental codes, a better use of the renewable resources and better monitoring of endangered species of animals and plants. In opposition to the NGOs there are several transnational economic groups, allied to the liberal governments and with several local and regional economic actors argue in favor of a more flexible and wider use of natural resources.

The regional populations of the poor countries, disorganized, uninformed and excluded from the decision-making processes characteristic of these two tendencies fail to mobilize themselves in the defense and in the usufruct of such mankind asset, which asset, also built up by them and by century-old generations that preceded them, as it is the case of vast regions of Africa, of Pan-American Amazonia and of Southeast of Asia.

The current process of accumulation of capital ranges from the global circulation of the virtual merchandise to the natural capital, including soils, water courses and the atmosphere and all their components, whether biological or not. The planetary dimension of the ecological issues and the environmental services rendered by the several biomas of the Earth, in particular by the Pan-American Amazonia, by Southeast Asia and by Central Africa make up an array of economic interests that articulate regions, countries and continents.

The economic projections for the environmental services, in planetary dimension, already surpass the sum total of the gross domestic products of the 8 richer countries in the planet (Costanza, 1997, p. 253). Contradictorily, the populations from those three regions, which possess the main world ecosystems are submitted to an increasing process of pauperization. Now, these areas, which jointly have more than 50% of the world biodiversity have become

great laboratories for ecological research activities.

The possibility that the vastness of those regions should "emprison" yet undeciphered scientific aspects continues being one of nexus with the economic groups having the hegemony of cut-edge technologies.

Current tendencies have shown an intense and increasing involvement of non-government organizations with environmental issues in those three tropical regions. Education and environmental monitoring, development of new technologies and technical and social asssitance to the rural populations, conservation and administration of natural resources, environmental inspection and mobilization of public opinion, ecotourism and ecological research are themes that, necessarily, make up the agenda of such world institutions. Modernity has discovered that the "tropical world" constitutes an important knot in the global dynamics of genetic storage.

Most research policies on biodiversity in those regions are anchored in three major axes: (1) in the relationship between the processes of mass and energy transportation in ecosystems and the dynamics of biodiversity; (2) in the preservation and restoration of biodiversity; and, (3) in the economic and social values of biodiversity.

In general such programs foresee: the integrated management of ecosystems; the conservation of the genetic resources and of biogeochemical cycles; the conservation and the recovery of the fauna resources; the recovery of degraded areas through agriforest systems and other alternatives; the management and the use of secondary vegetations; the management of wood and non-wood products; the integrity of hydrographic basins, the maintenance of aquatic ecosystems and its resources; water quality; limnology (biology of aquatic organisms and fish ecology); ethnobiology and social representations; fisheries and fishculture and landscape ecology (Folha de C&T, 08/2001).

Gradually, science and the world environmental movement as such have been executing a process of denaturalization of the last ecological frontiers by assigning them some value. The existence of complete disjunction between the scientific disclosure and the application of techniques, with the occupational matrix and the social demands within those economic frontiers constitute rising contradictions imbricated in the globalization processes under way.

This set of issues, many of them interlaced to each other and applied in different contexts, constitute epistemological elements for several research projects, and axes for different multilateral actions in course in the contemporary world. The heuristic range of such research programs surpasses the barriers of the sciences, involving political constructs and wider universal commitments than the disseminated concept of nature throught the current literature. Among the various possibilities, these commitments could result in an alternative optimist alternative of building a more equanimous and solidary world.

Emphasis to the greenhouse effect issue, one of the main ecological problems of the contemporary world. The consequences of this effect caused by the intensification of the concentration of carbon dioxide (CO_2) in the earth atmosphere, produced by the burning of fossil fuels, management and deforestation of new areas of occupation have already been incorporated into the diplomatic agendas of governments. Highlight to the correlation of this effect with the climatic stability and the environmental impacts in all the temporary and

space dimensions.

The continuing increase in the CO_2 concentration in the earth atmosphere, in the order of 270-290 ppmv (1 ppmv of CO_2 represents a part of CO_2 per a million parts of air) to 350 ppmv, of the industrial Age (1750-1800) to this date still constitutes a tendency. The developed countries lead the emission of this gas, with United States (27%), the Russian Federation (13%), Japan (6.4%) and Germany (5.5%) contributing with 51.9% of the global emissions in 1990 (La Rovere, 1999). With a political aggravation: although the contribution of United States to the greenhouse effect has progressively increased – recent projections (2001) have indicated that this country emits around 30% of the total CO_2 emitted annually by the polluting countries – , the government of this country refuses to ratify the main international agreement on the world control of emission of this gas.[3]

In the meeting carried out in July 2001 in Geneva**,** Italy, the 8 richest countries, responsible for 60% of the world's wealth and 70% of the international trade, and holders of the planetary political and economic hegemony have, again, failed to agree on a concensus as to the execution of the structural changes necessary for the inversion of this situation. The Kyoto Protocol, also signed by Bill Clinton in 1997, foresees that the most industrialized nations in the world would cut in 5.2% the 1990 level emission of the gases, which cause the greenhouse effect until 2012, especially carbon dioxide. The United States of America, responsible for the largest world emission rate resists and systematically boycotts this agreement claiming a probable negative impact on their global economy (cf. New York Times, 22/07/2001) and in the process of recession. According to Bush, president of United States of America, the execution of the Kyoto Agreement would imply in a cost of approximately US$ 400 billion and loss of 4.9 million employments, with impacts throughout the whole North American occupational matrix.

Another world controversy refers to the growing appropriation of the organizational processes and of biological differentiation, at the molecular scale, by the biotechnology industry. This issue projects a future with new ingredients for the "nature x culture" confrontation. The small but significant difference among the molecular structures of many biological organisms has contributed toward the intensification of research projects on the genetic evolution. The full control over animal and plant cloning processes, the development of transgenic products and the ample domain of the processes of construction of the life are targets, which guide the corporate actions of several transnational conglomerates in this sector. The possibility of transforming life into commodities has already been incorporated by markets and important financial centers. The possibility of man controlling his own evolution being able not only of conserving the species in its integrity, but also of improving on it and transforming it according to his own project has been created.

The borderline studies between chemistry and biology, biophysics and biochemistry mediated by ethics, are complex issues of major philosophical and historical reach. The principle of responsibility, as enunciated by Jonas calls for the need of making the effects of the man's actions compatible with the existence of a genuinely human life on Earth (Jonas, 1990, pp. 31-56).

In a certain sense, genetic engineering plays for the financial market a similar role to that played by the atomization of nature in the beginning of the 20th century. With a caveat: the advancement in the microscopic readings and measurement techniques, the major

availability of raw material in nature and the increasing appropriation and expropriation of the knowledge of the indigenous people and of the traditional populations by the biotechnological industry will accelerate and advance the consolidation of this market that already turns over some trillions of dollars. And worse still, as in the past, the scientific and technological processes characterized as revolutionaries enlarge the disparities among people creating new forms of dominance.

The United States of America and Canada currently dominate the research and the innovation in the biotechnological processes; until the year 2000, 76% and 7% of the biotechnological industries were North American and Canadian in origin, respectively (Bilan Du Monde, 2002).

The tendency of continuous ecological destruction of the Earth, with the projection of scenarios, which foresee the impossibility of existence of a healthy and harmonic planetary environment for future generations have induced and contributed, in the wake of the notions of sociodiversity and biodiversity, for the emergence of the notion of self-sustainable development.

This notion, in last run, attempts to reconcile the notions of development and ecological balance. Such balance is not anchored in proper foundations of philosophical concepts, which would serve as a basis for thought system.[4] And with an additional problem: the scientific knowledge that provides the support for the the technological processes, and that has as a paradigm the exploration of nature is grounded on Laws of Conservation. Laws, which are manifested through flows of energy and matter associated with the continuous transformations of different physical-chemical-biological entities, which make up the scenarios of nature in several scientific languages. The immanent presence of the irreversibility in these processes of transformations refutes the scientific possibility of existence of the notion of self-sustainability.

In the technological field, the technical application of this notion requires the substitution of the current energetic matrix as a central priority; it, also, imposes the ponderation of the concept of original accumulation, the driving agent of the expansion process and the circulation of the capital, a necessary instrument for impelling, modulating and perpetuating the pillars of the development processes, whether or not sustained. The notion of sustainability fails to make explicit the necessary inclusion of the legal disposition that provides historicity to the development into the social contract.

The systematic and irreversible destruction of the world primary ecosystems[5] by the developing countries, as well as the intensification in use of highly polluting technological matrices by the developed countries constitute a counterpoint to the self-sustainable notion of development that gained political validity in “Our Common Future” report, approved by the Assembly of the United Nations in 1987 (Freitas et al., 2002).

The incorporation of new political concepts centered on the “man-nature” indivisibility, and on the valorization of the collective processes, still continues subsumed by the large-scale voracity of profit. Similarly, the establishment of world programs, which stop the deterioration of nature is unfolded into the slowing down of the technical-industrial growth, fact that has hindered a collective action by the hegemonic governments towards the construction of a principle of responsibility, that will make the current economic interest and

the humanistic commitments of the Western civilization compatible.

On the other hand, the worst economic configurations of the developing countries projected for the 21th century, tend to reinforce the emergence and the crystallization of populistic and authoritarian governments in them. The increasing difficulty of access to the public policies by the great majority of their populations in continuous demographic expansion, favors the irruption of these political scenarios ensuing unexpected consequences in the establishment of policies geared towards the maintenance of the world's ecological stability.

Projections of the World Bank estimate that an investment of 5% of the overall expenses, by the governments of developing countries would reduce the number of undernourished children from the current 166 million to 94 million in 2020 globally. However, should the current political situation persist, in excess of 500 million people may not have a safe and continuous access to the basic food, and 130 million children in preschool age will live in subnutritional conditions in several outskirts in the subdeveloped countries in that same year.

This multilateral institution also projects the need the governments of the developing countries will have to obey the rules of laws, to adopt transparency in their political actions, to eliminate corruption and to respect and protect human rights as a necessary condition for achieving a self-sustainable development. It further emphasizes that national governments are responsible for the failures of the public policies in the developing countries (World Bank, 23.08.2001).

However, this same institution omits and fails account for the fact that the poverty and the terrible social indicators of those countries were, also, caused and institutionalized, both in the past and in the present, through economic and political undertakings, which articulate the interests of the governing elites of those countries jointly with this multilateral institution and with the great capital. It also omits the political and economic blackmail to which this institution [World Bank] and the IMF submit the outlying people. Based on more complex and realistic methodologies, the critical experts also question these statistics and project much more dramatic scenarios for the future of the humanking. And they insist on the need for structural changes in the political and economic constructs wich permeate the current civilizing processes.

Political manipulation, Media control, institutionalized corruption, spurious agreements, the absence of an organized civil society and of democracy in the vast majority of the governments of the underdeveloped countries have contributed towards the crystallization of such a situation.

The need for the construction of a more consistent and inclusive theoretical and empiric civilizing substratum that would redirect, mold and modulate the foundations of the economic global processes enabling the emergence and the hegemony of philosophical conceptions commited to cultural and racial diversities, with the differences and the social inequalities.

Within this context, the construction and the planning of new education policies, at all levels, acquire a special meaning. The tendencies of the current national and world educational systems that have the 'principle of competitiveness' and the 'financial imperative' as

assumptions need to be changed towards a tendency anchored in 'justness', instead. [6]

I refer to the principles stated by Martin Carnoy (1999, pp. 41-51) who has classified the educational reforms, in the context of the mondialisation of the culture, in the following manner: (1) the reform referenced by competitiveness that has the evolution of the demand for qualification vis-à-vis the needs of the national and the international labor market and the innovations of the organization of production of academic results and the professional competence as paradigm. This reform has decentralization, educational norms..., and the national management of the educational means as central axes; (2) the reform referenced by financial imperatives, which are based on the reduction in the volume of public deficit and on the transference of the State control of the national sources to the private sector, including the investments in education. This reform is permeated by a strong private-oriented component and by a reduction in the public spending on education, and finally, (3) the reform having justness as its basis anchored on the assumption of equality and on an education of quality. Such tendency reserves special attention to women, the minorities and strengthens the special educational programs.

Free education and public teaching of quality at all the levels should be assumed as a collective conquest and a universal right, and for this reason, they cannot be submitted to the market regulation. Budgets for the public financing of education need to be immediately increased, in a differentiated way, and establishing new international forums which would force and fix targets so that the countries, especially the outluing ones, strengthen their education systems in as a compatible form as their needs and their educational deficits.

The agreements, exchanges and diplomatic agendas between the developed and peripheral countries need to be recreated and revitalized with the establishment of new contours and delimitations of the world public debt by making more financial resources for fighting world misery and illiteracy. With prominence to the critical situation associated to the growing exploration of child labor in poor countries and to the premise that the increase in the number of schooled children does not imply in the growth, in same proportion, of the number of educated, formed, qualified children, capable earning a dignified wage in the exercise of a profession. In general, a mobilization on behalf of a universal education is totally detached from the labor issue (Schlemmer et al., 2002, p. 267).

And taking into account the consensual thesis that attributes to the agents of the ongoing globalization processes the co-responsibility by the increasing aggravation of the world eco-sociocultural indicators, the creation of specific global audits on the financial capital that supports and such processes becomes urgent with the establishment of taxes and specific fees[7] to facilitate a continuing flow of investments towards projects to be applied in regions, featuring more precarious social indicators. The sophistication of the current accounting methods already makes the implementation of such 'global taxes' coupled to the world networks and in real time possible.

Although tropical in nature, this proposal would enable, in the last run, the construction of reverse tendencies to the current situation of world poverty, contributing towards a more fraternal and just dialogue among the different peoples of the world.

II. The 21th century controversies and uncertainties

The world scenarios, which are projected for the future, definitively, contaminated by the 'bioterrorist' threat and by the political and religious intolerance, amplify the difficulties of the current diplomatic and multilateral forums to mediate a lasting, stable and systemic solution, with the necessary speed, for this mankind crisis. The need for societies and for different peoples to conceive new forms and mechanisms of world organizations, a new social contract has become a *sine qua non* for the contemporary world. The crisis is systemic and global and local issues could unchain unexpected political scenarios.

"September11, 2001" [8] has exacerbated this crisis and has become a landmark in the history of mankind projecting international terrorism as a stigma of this new Age. Mankind's old ghosts have reappeared: full control over individual, collective and world security; the West-East confrontation and the unpredictability of terrorist attacks.

Terrorist movements have changed their strategies and methods. The rigid and hierarchized structures specific of these groups during the 70s and 80s have been substituted by horizontal network-shaped articulations having mass extermination as their central objective. The vulnerability of the developed countries to the actions of terrorists due to their organizational structures, such as: the large urban concentrations, the mass transportation services and the administration of their essential services such as the electricity and water production and distribution networks have corroborated to the invigoration of the belligerent discourse; a discourse that has reinforced the conservative and reactionary thesis on the need for the development of new technologies for military applications and for guaranteeing national and world safety.

The proliferation and the increasing possibility of use of biological weapons in terrorist attacks terrorize unarmed civil populations and contribute to obstruct the construction of world peace (Delpech, 2002, p 26-30).

The expansion of the war industry feedsback these and induces new international conflicts. The growth tendency in global military expenditures constitutes an obstacle for the consolidation of world peace. The fast growth in the United States of America[9] military budget rebounds in the world geopolitics. The countries of Western Europe following a period of deceleration in their military expenditures since 1998 have once again increased this type of expenditure, prioritizing the reactivation of several military-oriented research projects. The contours of the war industry in the contemporary world are very mobile, however, the political scenarios have favored its expansion.

The emergence of a world public opinion more concerned with peace and with the fate of the planet has constituted one of the few concrete possibilities of braking this belligerent tendency. Particularly because the current Western political alliances may not be renewed in the future, leaving the other countries hostages of United States of America, the holder of the largest world war arsenal, and in an accelerated process of economic expansion. The new guidelines of this country's foreign policy "The United States Homeland Security Strategy" establish principles of the non-acceptance of challenges to their military supremacy and suggest the perpetuation of its world hegemony, generating and spreading a climate of political and economic instability in all the other governments. Despech (2002, p. 48) states

that the China has also recently announced a 17% increase in its military expenditure.

The report issued by the World Trade Organization that evaluates the world trade of goods in 2000 and part of 2001 forecasts major uncertainties in this sector for the years to come. The high subsidies for production, the restrictive government policies, the intensification of tensions among key sectors of the world economy, the multiplication of poverty... and the slowing down in the use of informatic and electric-electronic products are some of the factors which have been contributing towards the worsening of this situation. This fact causes the economic and political insecurity to increase ensuing serious impacts in the world occupational matrix.

The 8 plagues of modernity: racism, misery, war, structural unemployment, ecological destruction, child labor, the moral crisis and AIDS make up a complex of deadlocks making will have to deal with in this new century.

The recent political emptying of the World Summit on the sustainable development called "Rio+10" or Johannesburgo 2002, held in the period of August 26 to September 4 of this same year, is an important signal of the political tendencies of a group of industrialized countries that continues winning new followers. These countries, led by United States, Japan, Canada, Australia and New Zealand, formed a movement whose objective is to transfer the responsibility for the international negotiations on sustainable development and environment from the Organizations of the United Nations to the World Trade Organization, an institution over which they have a bigger control and that have its meeting further away from world public opinion. This same group of countries, also, articulates a strategy to minimize the responsibilities of the "State" for the ecological depreciation and fragmenting such responsibility with private institutions. In this Meeting, the results agreed by the representatives of 200 countries have proven tp be dismal vis-à-vis the seriousness of the current ecological and social issues.

This international forum has established a goal according to which, until 2015, the current proportion of people who earn less than a dollar a day would be reduced to half. The commitment of governments towards the preservation of the resources of the planet for future generations by prioritizing sustainable development was also restated.

By and large, as established in the document denominated "World summit on sustainable development - plan for implementation", put together in this forum, the following themes were discussed: irradication of poverty; the need for variations in the current non-sustainable consumption and production patterns; the protection and the appropriate management of the sources of natural resources that constitute the base for economic and social development; the sustainable development in a globalized world; health and the sustainable development; sustainable development for several places and regions (islands, Africa, Latin America and Caribbean, Asia and regions of the Pacific, European region); forms and strategies for the establishment of sustainable development; and the systems of institutional references for sustainable development. In this same forum the importance of the UN, with prominence to the General Assembly, the Social and Economic Council, and the Commission for Sustainable Development in international actions, as well as, in the invigoration and in the responsible institutional articulations towards the sustainable development at local and national level (ONU, 2002) were restated.

A set of protection measures for the future of mankind and the Earth has also been established, among which the following a deserving of attention: (1) until 2015, to decrease in half the proportion of people without access to appropriate sanitation. This objective, albeit the resitance by the United States of America, complements the goal of decreasing the number of people without access to drinkable water; 2) to implement actions to improve the access to energy. There was no agreement on specific objectives to improve the proportion of the produced world energy from the 'green' renewable sources, such as solar or aeolian energy. The European Union was in favor of these objectives, but United States and the oil-producing countries refused to support it; (3) to recover fish stocks until 2015 and acknowledging that the oceans are essential for the planet and a critical source of victuals, especially in poor countries; (4) it was agreed that, until 2020, chemical products will be made and used in such a way as to minimize the harmful impact to humans and the environment. And that the appropriate management of hazardous rejects will be promoted in such a way as to safeguard human health and the environment; (5) the World Trade Organization's agreement on patents has failed to stop the poor countries from distributing medical drugs for all the sick, an important and controversial issue, since the treatment against the Aids is very expensive; (6) the need for a substantial increase in the aid to poor countries, so that they can reach appropriate levels of development has been acknowledged. The need for the rich countries to contribute with 0,7% of their national revenues towards economic and social development programs in poor countries, as defined in 1970, by ONU has also been reaffirmed; (7) it has been acknowledged that globalization has had good and bad impacts in the different societies. While it offers better opportunities for growth of the world economy and better living standards for the rich countries, the poor countries face a great deal of difficulty in being adequately included in such a process; (8) the final text has also motivated trading without emphasizing that the rules of the World Trade Organization exclude the global environmental agreements, fact that has been considered as a victory by the environmentalist groups, which have feared that agreements such as the kyoto Protocol could be affected. The rich countries have reaffirmed that they will lower the current subsidies that unbalance world trade; (9) an agreement to significantly reduce until 2010 the rate of extinction of rare animals and plants has been secured; (10) an efficient and transparent national and international administration has been acknowleged to be essential for a sustainable development. The rich countries had wished to associate aid to poor countries to the condition of less corruption and more democracy in them; (11) the countries have agreed in beginning in 2005, a strategy to preserve natural resources for future generations; (12) the need for establishing a solidarity fund, with voluntary contributions, to put an end to poverty, "the largest global challenge that the world has today" has been agreed with; (13) The meeting has also reaffirmed the Principle of Precaution as an action axis in environmental protection even if the evidences of potential future damage to the world ecosystem prove not to be conclusive; and finally, (14) a principle of common and differentiated responsibility, which reaffirms that all countries have to try to save the planet, but that the rich countries need to provide for a greater funding has been established (ONU, 2002).

This Meeting confirmed the tendency towards a political fragilization such forums, reaffirming the deadlock in the construction of a collective and not conflicting solution in order to stop environmental depreciation and poverty in the underdeveloped countries. The creation of codes of conduct, systems of technical and financial cooperation and the definition of common policies do not justify the absence of practical deliberations, which expeditiously would revert the contemporary environmental and social crisis. The immediate

implementation of remedial and preventive measures against the accelerated world environmental and social degradation opposes the political interests of the majority of the rich country governments and contradicts the capitalist strategies of a major portion of the transnational economic conglomerates. Definitively, these political and economic forces [governments of the hegemonic countries and representatives of economic groups] already control the dynamics, the reach and the operationality of those forums.

The central countries continue believing in their powers of "persuasion" and "pressure" to solve this issue, when and in the form that best fit their interests. Silent, their people observe everything with socio-environmental concerns, which still populate their ficcionais mindframes. The transformation and convergence of such concerns for actions, policies, national and international agreements geared towards the immediate construction of a full "world citizenship", imbricated in the human dignification human and in the environmental preservation have not yet won the necessary contours for crystallizing ethical restrictions to the destructive nature of the current economic development models.

The need for societies and diferrent peoples have to conceive new forms and mechanisms of international organizations, a new social contract in the contemporary world is urgent. The tendency towards creating a new conception that internally and externally articulates the different fields of knowledge and also articulates men and women, the peoples, the cultures, the economic, political and scientific processes, confronting the subject with nature, with each other, with differences, with diversity, with inequality and with complexity is chrystalized, but based on multicultural principles and building the foundations for new commitments with universality.

It is within such a complex context that the Amazonia has been incorporated to the foundations of the civilizing process as main post-modernity ecological emblem.

Notes

1-These are the world social indicators - systematized by Tezanos, J., E. drawn from the documents "ONU: Informe sobre Desarrolho Humano 1988; 1999; 2000", e, "OIT: Informes sobre el trabajo en el Mundo (varios años)" – presented by José Antonio Caride Gómez in the article "Educación Ambiental, Desarrollo y Pobreza: Estrategias para 'outra' globalización", in: Reunión Internacional de Expertos en Educación Ambiental – nuevas propuestas para la acción, pp. 367-391; November 2000; Santiago of Compostela, Spain. The concern with these projections has been enlarged as far as can be verified, the constant permeability and permissivity of ONU to the interferences and manipulations of the economic forces and of the interests of the world market. More resolutes and critical studies will certainly verify a more dramatic social scenario.

2- Cingapure is the country that occupies the fifteenth position (2.2%) in the ranking of exporting countries. Within this same period, the world commercial exchanges amounted to 7.621 trillion of dollars, the equivalent of 30% of the World Gross Domestic Product (Bilan du Monde, 2002, p. 14).

3- The studies on climatic changes carried out by Hulme (1999) and made public by the World Wildlife Fund (WWF) – a non-government organization that acts with the firm purpose

of defending nature -, advance that if preventive measures are not taken, the current CO_2 emission will increase in 4–320% above the current concentration level, until the year 2100. The current concentration of 370 parts of CO_2 per a million parts of air (370 ppmv) shall increase to about 550 ppmv in 2100, for a scenario of lesser emission or above 830 ppmv for a scenery of higher emission. These projections reaffirm the gravity of the greenhouse effect in the world climatic stability.

4- It can be absolutely stated that the sustainability principle has as presupposition the central idea of building an "ethical modernity" that will stop the destruction of the self-affirmation and human perpetuity process on Earth... In a perspective in which one has an ethical modernity and not just a technical modernity... An ethics that can be constructed as a radical criticism of the notion of destiny intertwining intelligence and freedom in a virtuous liaison with the good. However, such universal ethics poses major issues vis-à-vis mondialisation of the technical and scientific culture... Modern science methodologically supposes the distinction between fact and value, and acknowledges itself as ethically neuter, remaining in a strictly extrinsic relationship with the sphere of the good. See: Carlos López Ospina; In: Reunión Internacional de Expertos en Educación Ambiental – nuevas propuestas para la acción, pp. 30-31; Santiago de Compostela, November 2000, Spain.

5- Within this context, the term "primary" designates the natural configurations, specific of soils, waters and atmosphere comprising an ecosystem.

6- Equity is a notion that comprises persons, communities, peoples and nations; a notion that is intertwined with social diversities and with the right for self-determination, and that potencializes the political and economic instruments proper and necessary for each development model.

7- In 1972, James Tobin, Nobel prize in economics, proposed the collection of a tax on all the speculative transactions in the world finance markets. The Tobin Tax, as it became known, in the amount of 0.1%, would enable the collection of an annual sum of about US$ 166 billion, at that time. An amount twice that needed to eradicate the world's extreme poverty, from that period to the end of the 20th century. The indifference of the hegemonic governments in creating the political conditions, necessary to operate such a rich proposal has shifted it from the center of the debate on the growing world social inequality.

8- It dates the terrorist attack that killed 3025 people (projection not yet officially confirmed) in World Trade Center, New York, inaugurating a new Age of East-West confrontation.

9- The military budget of United States of America in 2000 amounted to US$374 billion, about 1.83 higher than the sum total of the military expenditures of the others world 7 richest countries (Japan, Germany, France, United Kingdom, Italy, Canada and Russia) in this same year.

References

Bilan du Monde (2002) Paris: Le Monde.

Bourg, D. (2002) “Des problémes résolument contemporains”, in: Anne-Marie Ducroux (Ed.) Les nouveaux utopistes du développement durable. France: Éditions Autrement-Collection Mutations.

Carnoy, M. (1999) Mondialisation et réforme de l’éducation: ce que les planificateurs doivent savoir. Paris: Unesco.

Costanza, R.; D'Arge, R.; De Groot, R.; Farber, S.; Grasso, M.; Hannon, B.; Limburg, K.; Naeem, S.; O'Neill, R.; Paruelo, J.; Raskin, R., G.; Sutton, P.; Van Den Bet, M. (1997) “The value of the world´s ecosystem services and natural capital.” Nature, vol. 387, 253-260.

Dallmeier, F. (2000) “Biodiversity: Earth’s most important and most threatened asset”, in: Reunión Internacional de Expertos en Educación Ambiental – nuevas propustas para la acción. Santiago de Compostela: Editions Unesco.

Delpech, T. (2002) Politique du caos – L’autre face de la mondialisation. Paris: La Republique des Idees Seuil.

Folha de C&T (2001) Folha de C&T do PPG7, Ano V, nº 12. Brasil: Boletim Informativo do Ministério de Ciência e Tecnologia do Brasil.

Freitas, M.; Meunier, O.; Alloufa, J.; Silva Freitas, M., C.; Renan, E., F. P (2005) Amazônia: a natureza dos problemas e os problemas da natureza. Manaus: Editora da Universidade Federal do Amazonas, Manaus, Brasil.

Hours, B. (2002) “Le développement durable, instrument d’intégration globale”, in: Jean-Yves Martin (Ed.) Developpement durable ? doctrines, pratiques, évaluations. Paris: IRD Éditions.

Hulme, M. (1999) “Scenarios of global climate change impacts.” See electronic address of the WWF, <htpp://www.panda.org>.

Jonas, H. (1990) Le Principe Responsabilité. Paris: Éditions Champs Flammarion.

La Rovere, E., L. (1999) “Impasse na proteção do clima”; Opinião, Ciência Hoje, vol. 25, nº 146, 52-55, Brasil.

Lefetey, P., B. (2002) “Dette financière contre dette écologique”, in: Anne-Marie Ducroux (Ed.) Les nouveaux utopistes du développement durable. France: Éditions Autrement-Collection Mutations.

Lévêque, C. (1997) La Biodiversité. Paris: Presses Universitaires de France.

New York Times (22.07.2001) News published in the first page of this important newspaper from the New York, United States of America.

ONU (2002) Plan of implantation of sustainable development, elaborated in the Meeting of Sustainable Development accomplished in Joanesburgo, in 2002. See electronic address "www.un.org".

Ospina, C., L. (2000) Conferencia de Clausura: La reforma del pensamiento com miras a un futuro sostenible; In: Reunión Internacional de Expertos en Educación Ambiental – nuevas propustas para la acción. Santiago de Compostela: Editions Unesco.

Reed, D; Rosa, H. (2001) "Economic Reforms, Globalization, Poverty and the Environment." See ONU electronic adress, <htpp://www.un.org>.

Sagan, C. (1999) Bilhões e Bilhões – Reflexões sobre vida e morte na virada do milênio. Translated by Rosaura Eichemberg. São Paulo: Editora Companhia das Letras.

Schlemmer, B.; Martin, J.Y.; Ahmed, A., S.; Waast, R. (2002) Le défi de La mondialisation: marchandisation ou partage des savoirs ?; In: Developpement durable ? doctrines, pratiques, évaluations, pp. 265-285; Collectanea organized by Jean-Yves Martin, IRD Éditions, Paris.

Tezanos, J., E. (2000) Projeções sócio-econômicas apresentadas por José Antonio Caride Gómez no artigo Educación Ambiental, Desarrollo y Pobreza: Estrategias para "outra" globalización, in: Reunión Internacional de Expertos en Educación Ambiental – nuevas propustas para la acción, pp. 367-391; Santiago de Compostela, Espanha.

Unesco (2000a) Conférence mondiale sur la science – La science pour le XXI^{e}. Un nouvel engagement, 53 pp. Unesco, Paris.

_____ (2000b) CD-ROM: Une décennie d'éducation dans le monde, pp. 46-50; Unesco, Paris, France.

Wacquant, L., J., D. (1993) De l'Amérique comme utopie à l'envers, p. 274; In: La Misere Du Monde, coletânea organizada por Pierre Bourdieu, Edições do Seuil, France.

World Bank (23.08.2001) Draft: Sustainable Food Security For All By 2020, 26 pp., International Food Policy Research Institute, <Web: www. Ifpri.org>, NY, USA.