

BIOPOLITICS: A NEW DIMENSION OF THE CONCEPT OF PROFIT

Dr. Agni Vlavianos-Arvanitis

President and Founder

Biopolitics International Organisation

Greece

The world economy has currently reached the point of fundamentally revising its attitude towards the bio-environment. Policy-makers have started to realise that respecting bios (life) is crucial to the survival of humanity, and that, if environmental destruction is to be curbed, policies ought to be developed and implemented with the intention of promoting harmony and coexistence among all forms of life. Applying available financial and human capital, to invest in soil and water resources, in pollution prevention and in the development of recycling technology, will not only lead to a successful promotion of cleaner production and environmental management, but will also result in a critical reassessment of current assumptions and a new corporate strategy to meet the demands of an increasingly environmentally-conscious society.

In view of this pending task, economic science must seriously contemplate the inclusion of concepts that are presently considered abstract and qualitative. It is necessary to develop sound indicators for the formation of financial policies, taking into account the need to preserve natural resources and retracing environmental impact. The issue of quality of life needs to assume top priority, as well as health, happiness, internal wealth, culture and education. These elements, which are often excluded from conventional theory of finance, need to become the framework for the new economics of the 21st century.

Since its inception in 1985, the Biopolitics International Organisation (B.I.O.) has been advocating the introduction of bios-oriented values into economic decision-making, and has been encouraging corporate leaders to channel their business activities in an environmentally-friendly manner. Furthermore, the B.I.O. has been stressing the need to set ethical prerequisites for the development of new technologies and clean energy systems, in order to respect and benefit bios and the bio-environment.

The bio-environment can provide the necessary unifying dimensions to transcend boundaries and attain international co-operation. Furthermore, the bio-environment can become the interdisciplinary link between culture, diplomacy, business and trade, leading to a new era of bio-culture, where every endeavour will be governed by biocentric principles and orient towards the appreciation and preservation of bios on our planet.

The B.I.O. would like to stress the importance of bio-culture for the corporate world. In the pursuit of environmentally compatible economic strategies, long-range policies, where the issue of quality of life will become a measurable item and not merely an abstract concept, are essential. Safeguarding the environment needs to become a concrete asset of every nation's prosperity. Within this framework, financial success needs to be evaluated on the basis of improving living conditions, on the entire planet, and contributing to the most challenging task of reversing destructive trends. Moreover, the concept of profit has to be redefined, in order to include dimensions of internal wealth, preservation of natural resources as a measurable part of a nation's prosperity, better health and the protection of biodiversity, which constitute a "genuine" profit for society.

Regulation is a priority, whether it comes in the form of taxation, legislation or education. Furthermore, global mobilisation is crucial and public participation, on both a local and international level, can provide the necessary incentives for the establishment of world-wide, bios-supporting policies. Modern technology and scientific breakthroughs constitute powerful tools, resulting in many opportunities for business and leading the way to a new societal structure. It is therefore essential to guide this progress towards a positive direction and apply a millennium vision to decision-making and policy-planning, in order to preserve the earth for the generations to come.

Investing in the Bio-Environment - A New Source of Business Opportunities

Bank of Ideas - Mapping the Evolution of Environmental Awareness

The rapid growth of information technology opens up new pathways of knowledge and expands the boundaries of human thought. However, the current environmental crisis is shaking the very foundations of both the private and public sectors. Ethical values, societal structure, and national and international issues have to be re-examined with reference to the new perspectives of modern society. Bios and the bio-environment can therefore become the new focal points for a re-evaluation of priorities in society and the development of new models and new thinking for the future.

Up to now, only a privileged few had the opportunity of making their reflections and ideas available on a wider basis, and valuable

contributions from less prominent individuals are forever gone. Humanity has documented the experiences of historical figures, political and spiritual leaders, scientists and intellectuals, but the wisdom of the general public is not known. Are we aware of mainstream thinking in antiquity? Are we aware of societal norms in the Middle Ages? Certain scholars have recorded general trends, in specific geographic regions, but, we do not have concrete or global documentation of what was widely accepted by ordinary citizens, around the world, or what they considered important.

In order to allow for every individual to express and document their thoughts, B.I.O. has, since 1985, been promoting the establishment of a computerised Bank of Ideas in which any interested party, may deposit their thoughts on environmental issues and create a rich source of information and reflections on bios and the bio-environment. This depository would be available to future generations, in order to serve as a treasury of material for the development of society in the years to come. Furthermore, this Bank of Ideas would reflect the evolution in thinking and morality, continuously taking place all over the world.

Transcending thoughts passing boundaries
of limiting space potentials
Crossing bridges of transparent solids
Energy waves of eternal messages
leading to communication
Faster than flashes of the soul
Brighter than a laser beam
Piercing everything
Spreading everywhere

(Dr. Agni Vlavianos-Arvanitis, Oscillations, 1983)

Not too long ago, environmental problems were not even acknowledged, let alone seriously addressed. With the current environmental crisis, we have witnessed a shift in public opinion, as well as an increased awareness of the gravity of the situation and of the urgent need to take action against destructive trends. This turn of events demonstrates an evolution in our ability to perceive and define priorities in society, according to the challenges we face. The trajectory of this evolution, going from ignorance to awareness to sensitisation and, finally, to active participation could serve as a valuable tool for pin-pointing societal progress and could aid our efforts to counter environmental abuse, on a world-wide level. With the establishment of a Bank of Ideas, we would acquire a concrete record of this trajectory and would thus be able to determine all the parameters of change, making the processes of taking action easier and more effective.

The evolution of human thought is a dynamic process and its potential lies in the continuous emergence of new variables. Determining the constant and variable elements can lead to a new appreciation of priorities in society, as well as a critical evaluation of the future. An interactive Bank of Ideas can serve as documentation of the evolution and transition in human thought for present and future generations. Information technology and faster communications will carry us into the third millennium. It is essential to apply this technology to capture the wisdom of humanity and make it available to the entire world.

Quality of Life	
Ethical Values	
Legislation	<ul style="list-style-type: none"> • Health - Safety - Justice - Happiness - Co-existence with all forms of life. External and Internal Wealth - Micro-Environment - Macro-Environment
Macro and Micro-Economics	<ul style="list-style-type: none"> • Diachronic Values for Society - New Criteria for Business Compatible with Quality of Life
Bio-Diplomacy	<ul style="list-style-type: none"> • National - Global - Bios Rights - Bio-Diversity - Global Warming - Ozone Depletion - Overpopulation - Poverty - Deprivation
International Commerce	<ul style="list-style-type: none"> • Time and Space Scale - Historical Perspective - Millennium Approach - Cleaner Production
Governance	<ul style="list-style-type: none"> • Interdependence - International Cooperation - Third World Viewed as Partner
Education	<ul style="list-style-type: none"> • Durable Development - Internalizing External Costs - Consumer Protection
Media and Communications	<ul style="list-style-type: none"> • New Models of Participatory Democracy - World Referendum - Defense for Bios
Energy	<ul style="list-style-type: none"> • Biocentric Curriculum in Economics - Satellites in Education
Employment	<ul style="list-style-type: none"> • Internet Communication Feedback - Satellite Diffusion of Information - Marketing • Protection of Resources - Study of Bios Models • New Opportunities for Employment in Bio-Environmental Protection - Green Salary for Unemployed

Humanity is wasting time. In order to exit inflexible thinking processes, which have led to disastrous situations, immediate action is crucial. Solving environmental problems requires a dynamic approach, combining past experience and present opportunities to establish new, enriched models for the future. The challenge is to calibrate growth with reference to biocentric parameters and expand our vision for the coming millennium. We live on a small and fragile planet. The continuation of the chain of life on this planet is the most essential task for all.

The Changing Role of Communication Technology

Communication technology offers, without doubt, major business opportunities for the future, in addition to having a most crucial social impact. Of the many factors responsible for shaping modern society, Media and Communications are perhaps the most potent. As a result, communication technology can become the vehicle with which to inseminate society with new biocentric thinking, and provide a world-wide multidisciplinary exchange of information promoting appreciation of the bio-environment as the core component of every human endeavour.

We are moving into a truly interdependent world, where communication is vital to development. Information technology can bring the world together. Mass media has the power to influence and the power to educate, and this power should be applied to guarantee peace and international co-operation, eliminating isolation and division. It also has the potential to raise the necessary global awareness of the urgent need to take action against environmental destruction and abuse. International bio-education through satellite communication can be one of the many ways of applying this potential, in order to achieve environmentally literate global citizens. Such projects, in addition to providing direct and efficient exchange of information, can allow for world-wide simultaneous participation in the attempt to preserve bios on our planet. Meanwhile, as a more immediate plan of action, the B.I.O. has been proposing the introduction of a news bulletin on the bio-environment, as a regular item on news programs, in the same way that weather and stock-market reports already are.

New Trends in Energy Use and Waste-Free Production Cycles

Within the new framework of societal needs, inclusion of environmental dimensions in the quest for new energy sources is critical. As has been well established from the study of various physical or social systems, the uncontrolled evolution of an isolated system leads to maximisation of entropy, the tendency to disorder. Similarly, entropy is generated in society through the unforeseen applications of technological progress, the destruction of the bio-environment, resource depletion and the explosive economic problems of developing countries. For this course to be reversed and for entropy to be decreased, the world community needs to develop regulating mechanisms, based, not only on measures of purely economic nature, but mainly on new values and norms in business and society. A long range bios-promoting policy may contribute to alleviating inequalities and prove to be profitable in any endeavour.

One of the main B.I.O. objectives is the sensitisation of experts in the field of energy to the need for developing alternative energy sources, thereby alleviating the "dependency on non-renewable resources in order to achieve a sustainable world economy." In this context, considerable emphasis has been placed on research and development of renewable and clean energy sources

Environmentally-friendly production can be promoted by introducing resource and pollution taxes and other incentives for cleaner production. Efforts should be made to make businesses aware that it is in the interest of their own survival and long-term profits to protect the bio environment. Important steps were already taken in this direction in the 1980's, as the oil crisis was overcome by introducing methods for decreasing industrial oil consumption.

However, industrial production should become dependent upon renewable energy sources rather than the continued use of non-renewable sources and raw materials, whose large-scale use poses environmental threats. Economic growth could be based upon the use of bio-energetics. Bio-energetics is aimed at replacing non-renewable energy sources (oil, coal) by fuels (ethanol, hydrogen, biomethane, acetone, butanol) produced by microbial cells. This will lead to the prevention of both resource depletion and environmental pollution. Alternative energy sources, such as solar or aeolic energy, should also be employed, and the existing techniques of energy conversion should become more efficient.

The concept of transition in the industrial value system consists of replacing existing pollution control methods with a new strategy of reduction at source. As a result, the principle of "pollute and compensate" becomes "pollute not." The United Nations Environmental Program (UNEP), has defined cleaner production as: "a new theoretical and practical approach to production, that requires the careful examination of all aspects of the life cycle of products and production processes, in order to prevent, or reduce, long- and short-term health and environmental hazards." This approach is significantly different from the conventional end-of-pipe (EOP) treatment.

It has been well established that cleaner production methods are not only environmentally friendly, but also contribute substantially to a decrease in the cost of production and waste administration, and can thus be very profitable financially. Reuse and redistribution of raw materials is becoming the primary goal of many countries world-wide, in order to minimise over-consumption of natural resources. Recycling constitutes the major vehicle for achieving the desired results. However, in order for a complicated procedure like recycling to be successful, the following guidelines ought to be followed:

-
- Cleaner production methods, resulting in waste reduction at source, should be implemented. In addition, products should incorporate as many recyclable components as possible.
- New techniques should be researched. We need to direct our attention towards applying biological principles to existing production methods, and thus minimise the demand for costly chemical procedures.
- Public awareness concerning the importance of recycling programs should be raised. In order for these programs to be effective, it is important that recycling becomes accepted as a societal value by the community. However, technical information should also be provided, so that over-enthusiastic consumers do not get carried away, and potentially hinder the process.
- For the circle to be complete, citizens should also make a conscious effort to purchase products made from recycled materials. Biopolitics suggests that a new code of ethics be adopted, so that a new set of cultural values can be established. Media could also play an important role in achieving this desired goal.

Green Salary - New Employment Opportunities

With current unemployment rates rising and governments forced to allot significant portions of their budgets for covering unemployment benefits, the time has come to seriously consider viable alternatives to counter the situation. The B.I.O. has been promoting the introduction of a Green Salary for the unemployed, with the commitment to work for the protection of the bio-environment. Projects could include tree planting, city cleanup, recycling, resource recovery and many other similar constructive activities. This Green Salary can help elicit a positive feeling among the unemployed, in addition to providing new opportunities for work and aiding the attempt to lower unemployment levels. Moreover, businesses could be granted special tax deductions when providing opportunities for the unemployed to be involved in environmental projects.

Genetic Banks

The role of Genetic Banks, in wildlife conservation efforts, has long been considered of great importance. Preserving the genetic material of endangered plant and animal species can help restore genetic diversity in these species and significantly contribute towards protecting biodiversity on our planet.

Along the same lines, the B.I.O. has been promoting the establishment of "local" Genetic Banks, as a means of protecting the enormous wealth and diversity of endemic wildlife. The information stored in these Genetic Banks would become available on computer databases and be distributed world-wide. As a result, conservation efforts could be better co-ordinated and the urgent task of preserving biodiversity would be accelerated. Furthermore, Genetic Banks could easily exchange information on newly available technology and improved methods of collecting and storing data, thus leading to an efficient and easily accessible means of retrieving the information and applying it to the benefit of the bio-environment. This would result in conservation efforts that no longer took place in isolation but, belonged to a global attempt to

save bios on our planet.

Bio-Tourism

Tourism can be among the most important and profitable industries of any nation. As modern technology is continuously contributing to making travelling easier and more affordable, new possibilities for tourist development are opening up all over the world. This development, however, should not be carried out at the expense of the environment, which unfortunately often seems to be the case. We all need to realise that the environment can be a tourist attraction in itself. After all, the most sought-after tourist sites world-wide are those located in areas of exceptional natural beauty. Nevertheless, tourism and environmental protection are invariably regarded as incompatible projects.

In an effort to raise awareness of the importance of incorporating environmental protection as an essential dimension in every aspect of economic and intellectual endeavour, the B.I.O. wishes to draw attention to the concept of bio-tourism, a profitable and efficient way of caring for the environment, while pursuing new opportunities for tourist development. More than just a conventional catering service, bio-tourism sets an example of how environmental preservation is becoming a necessity for successful business activity and may evolve as one of the most important aspects of a country's international image.

Bio-Diplomacy - Investing in "Defence for Bios"

Present threats to bios are international problems. The required solutions entail the development plans of action for peace and international understanding. International co-operation may lead to a new era for the diplomatic world; the era of bio-diplomacy. Nations will no longer be at war with each other but, with environmental destruction and abuse. Foreign policy may thus shift from a fragmented, competitive framework to a vision of unity and interdependence.

Bio-diplomacy recognises that cultural differentiation constitutes the wealth of the body of humanity. Furthermore, humanity is part of the overall body of bios, where DNA, the genetic code for every living organism, is the link connecting all forms of life. Trees, the source of oxygen on our planet, can be considered the "lungs" of the body of bios. Damage to the lungs is not an isolated event but results in the whole body suffering. These unifying concepts will be promoted as the primary consideration of bio-diplomacy which will be involved in enhancing international co-operation on environmental issues and will actively support all efforts to protect and maintain biodiversity. At the same time, bio-diplomacy will seek to improve human relations and attain the goal of world peace, by replacing current diplomatic attitudes with a complete international and intercultural perspective.

To encourage international co-operation on the bio-environment, the world needs to stop investing in war and start investing in the preservation of bios and the bio-environment. Competition for ways to destroy, should become co-operation for ways to save. Without interfering with vested interests, the greatest challenge for the 21st century should become the development of new ways of channelling current defence protocols so as to adopt the principle of defence for bios as the number one national and international priority.

Presently, enough incendiary weapons exist to destroy the earth several times over. Our planet is the only planet we know of where life exists. What purpose will it serve to wipe it out just to satisfy greed and over-consumerism? We need to realise that the real enemy is the depletion of the ozone layer, pollution, ignorance, starvation and disease. We cannot escape this planet. Billions of dollars have been invested in trying, while in the meantime life on our planet is jeopardised by our irresponsibility and pursuit of short-term satisfaction. While the B.I.O. respects space research and does not desire to limit its progress, it is evident that, at least in the foreseeable future, space travel cannot guarantee our survival.

Bio-Education for a Global Responsibility

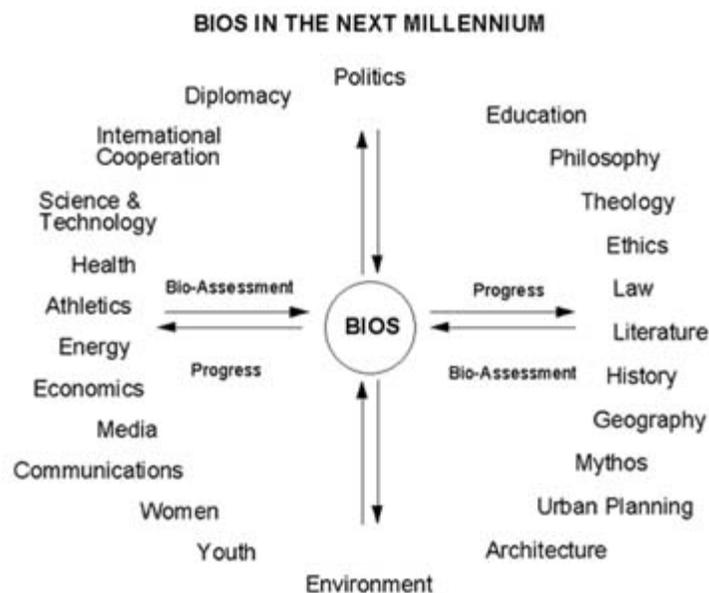
In the search for new models and a new vision for the future, an integrated biocentric education, that secures lifelong environmental literacy for every citizen in the world, is a necessary vehicle for the successful furtherance of a global appreciation of bios. Bearing in mind that universities should be, by definition, "universal," the International University for the Bio-Environment (I.U.B.E.), launched by the Biopolitics International Organisation in 1990, promotes a model bio-education, by introducing interdisciplinary educational reforms, on a world-wide basis. Information technology breakthroughs, such as satellite communication and the Internet, are considered among the most important tools for the timely realisation of this project.

Recently, the I.U.B.E. acquired permanent headquarters in the park of Rodini, on the island of Rhodes, Greece. This offers the possibility for the dynamic implementation of I.U.B.E. goals and the acceleration of the I.U.B.E. Visiting Scholars Program, whereby leading educators and decision-makers from around the world will insemminate existing educational institutions with new bios promoting values. The aim is for the I.U.B.E. site at Rodini to become a world-calibre centre for the development of multidisciplinary environmental concepts, outside the confines of conventional environmental science, leading to a revised educational system for the entire planet. Major goals of the I.U.B.E. include:

- establishing international educational reforms, and promoting an efficient, global bio-education, through the Internet and the use of

satellites and other communication links

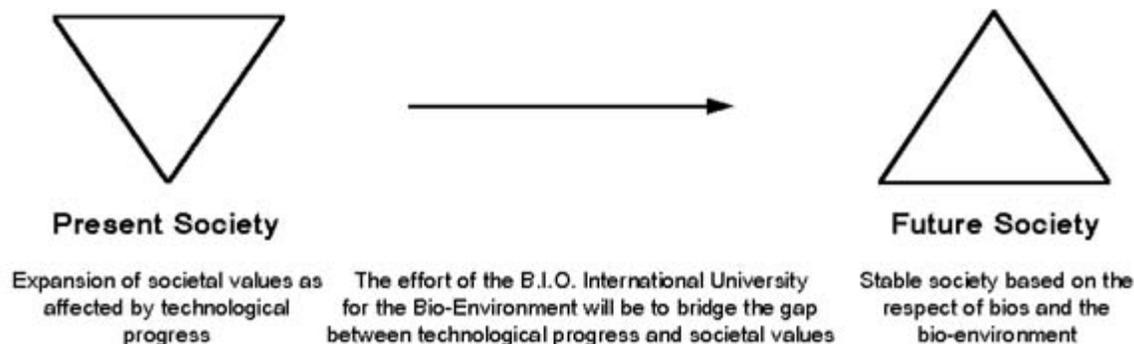
- instating international co-operation for environmental protection, leading to a new era of bio-diplomacy



- redefining the basic core of educational curricula and incorporating interdisciplinary elements into all educational programs, making bio-environmental education the major interdisciplinary link, world-wide
- promoting international legislation on bios rights
- contributing bios-related dimensions to business and management concepts and setting up the framework for New Economic Strategies, compatible with environmental preservation
- providing incentives for business leaders, political decision-makers and the general public to elaborate on a new strategy compatible with the interests, needs and values of the bio-environment
- organising an international campaign for Environmental Olympics and awarding Bios Prizes to "individuals or institutions that have contributed to the preservation and appreciation of the bio-environment"
- sensitising public opinion to the ramifications of the biological sciences
- promoting an international bio-assessment of technology, so as to ensure technological and economic progress that support the bio-environment

Bio-Assessment of Technology

Present society resembles an inverted pyramid, with human rights representing the tip and technology expanding the unstable base. This imbalance could be changed if we "re-invert" the pyramid and place bios rights as the wide base of our society. Human rights will then occupy the stable tip of the structure.



A world-wide bio-assessment of technology can contribute towards bridging the gap between technological progress and societal values. Progress may be viewed through the scope of Bios in the Next Millennium and retain positive aspects that help in the preservation of the bio-environment. In a dialectic exchange of views, experts in respective fields will be asked to present a thesis and antithesis, and then create a synthesis of new concepts. Emphasis will be placed on identifying ways of reducing negative environmental impact, so as to truly benefit from the contributions of technological breakthroughs.

Greece can be the ideal meeting place for people from all disciplines to convene and assess progress in their respective fields. Every corner of the country may represent a separate field, depending on its cultural contribution. Delphi could be the place for philosophers to convene and propose future values for society. Patmos, the island of the Apostle John, may serve as the meeting place for theologians to examine the effects of technology on religion. Olympia may serve for the assessment of athletic values, Kos for Medicine, Rhodes for Tourism, Ikaria for Aeronautics and Thraki, the birthplace of Demokritos, for the Physical Sciences. Mythology, history and tradition, as well as modern technology, may combine and provide a future based on the harmonious coexistence of all forms of life.

However, in addition to a theoretical approach, action needs to be taken, in order to apply technological progress towards preserving the environment. It is therefore necessary to:

- develop new curriculum materials for all educational levels, as well as audio-visual materials on issues related to bios and the bio-environment
- introduce a positive feeling among the unemployed, by paying a Green Salary instead of benefits, and having the unemployed engage in environmental projects (tree-planting, resource recovery, recycling etc.)
- generate environmental action groups, utilising both the enthusiasm of the young and the experience of senior citizens, to tackle local issues
- establish local Genetic Banks, as a means for protecting biodiversity
- encourage the establishment of a clearing-house as a means to provide a network of people wishing to co-operate on bios related issues
- establish a computerised Bank of Ideas in which any interested individual may express their thoughts and create a rich source of information and reflections on bios
- elicit the co-operation of the media, so that a news bulletin on the bio-environment may become a regular item on news programs, in the same way that weather and stock-market reports already are
- organise a World Referendum so as to allow people throughout the world to express their willingness to preserve bios on our planet

A New Pathway for Democracy

As humanity enters the next millennium, the issue of bios will grow in complexity. More than just the appreciation and protection of the bio-environment, in all its varied manifestations, humanity will have to confront fundamental moral, legal and political dilemmas resulting from cumulative technological advancements. These advancements could be life-enhancing or life-threatening depending on our ability to understand their various implications, as well as our readiness to preserve the common good. The urgent task ahead is to inform the public regarding these challenges, so as to be morally and mentally prepared to face the uncertainties ahead.

In this crucial endeavour, it is essential to have global participation. Up to now, even in democratic regimes, citizens rarely speak out as a majority and are often overshadowed by the presumptuous attitudes of arrogant minorities. Present breakthroughs in the field of communication technology can provide the opportunity for the public to be actively involved in issues concerning our daily lives and be able to cast a vote, anytime, through computer networks and other communication link-ups, which can make immediate feedback possible from any corner of the globe. A proposed World Referendum on the commitment to protect the bio-environment can be the manifestation of such an attempt, with many more dimensions to follow. These dimensions can open up new pathways for a participatory democracy, where opinions will be actively expressed and politicians will no longer be able to evade their responsibilities.

In order to avoid a robot-like, mechanistic society, human creativity needs to be channelled towards an inspired and productive "renaissance." Technology, coupled with a sound system of values, provides ample opportunities for growth and can lead to the blossoming of the human spirit. As we are traversing an electronic era, telecommunications will inevitably shape the future of our society. It is therefore imperative that we apply the full potential of these new tools to guarantee a society made up of responsible and affected citizens.

Environmental Olympics - Bios Prizes - Athlos as an Intellectual Achievement

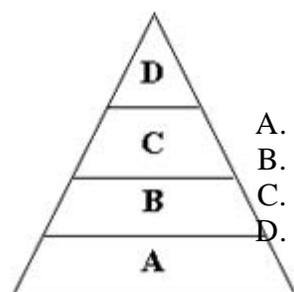
In the quest for new societal values for the next millennium, revival of the ancient Olympic spirit can contribute the necessary dimensions of unity and harmony to the development of every aspect of human endeavour. The Olympic Games, held in Greece for over ten centuries, constituted important political and cultural events, promoting a unifying vision of peace, kinsmanship and reconciliation.

Currently, the Olympic Games, a beacon of world peace and hope, award medals only for physical prowess. Moreover, the concept of athletics is synonymous with sports and feats of the body. Yet we should be reminded that the term athletics comes from the Greek word athlos, meaning achievement. Therefore, athletics encompasses all possible achievements of humanity, whether physical or spiritual. It is thus

important that the concept of athletics regains its original significance and becomes redefined, on the basis of a new system of values.

The bios theory embraces the spirit of harmonious development, both mental and physical. People should not confine themselves to striving for excellence in sporting events only. In order to promote the bio-assessment of technology and a global bio-culture for the new millennium, the Biopolitics International Organisation has been proposing the creation of multidisciplinary international committees, assigned with the responsibility of assessing progress and awarding Bios Prizes to individuals, or institutions, that have significantly contributed to the preservation and appreciation of the bio-environment.

At present, international competitions take place in various fields, such as music, poetry, theatre and scientific research. However, these competitions represent a fragmented view of human achievements. In order to re-establish the harmony and unity behind all expressions of human creativity, an overall recognition and award of achievement in sports, arts, and science may be carried out simultaneously, every four years, on the occasion of the Olympic Games. For example, legislators could be awarded for developing new legislation regarding bios rights; architects, for having worked in the construction of "biopolis" models; corporate leaders, for including environmental protection in their business activities. Prizes could be awarded in several disciplines, such as ethics, legislation, economics, business, theology, architecture, diplomacy, or philosophy, with the hope to eventually include all human accomplishments.



Example: Bio-Business

- A. Global business community to nominate candidates
- B. Leading CEO's to receive nominations and propose up to 150 candidates for award
- C. Elected 30 member International Com-mittee to select 15 nominations
- D. 3 member International Committee to award 3 Bios Prizes

The Olympiads should be periods of world peace and occasions for all citizens of the world to celebrate the unifying concepts brought forth by the Olympic spirit. At the same time, the global community can be sensitised to the value of a harmonious co-existence as a vehicle for achieving a better quality of life. Within the spirit of bio-culture, the B.I.O. has been proposing the revival of the ancient ideal of cease-fire during the Olympics. The hope is that the bio-environment will act as a unifying force for peace, leading to a new social structure, where respect for bios will be at the core of every action and thought.

The Periodic Table of Economic Science

Environmental preservation is inextricably linked to economic progress. Preserving the wealth and beauty of the bio-environment, securing the health of the earth's population, and guaranteeing equal educational opportunities for every country in the world can be a source of genuine profit, both monetary and social.

Economics will need to be upgraded to a comprehensive science, in order to eliminate negative stereotypes of fragmentation and mutual exclusion. The study of the intricate relationships between economics and all the varied manifestations of our natural and cultural heritage can provide the missing elements for an integrated understanding of economic phenomena, thus leading to the formation of the Periodic Table of Economic Science, much like the periodic table of elements in chemistry, that the Russian chemist D.I. Mendeleev drafted more than a century ago.

In devising the periodic table, Mendeleev captured the order of the universe. Not only was he able to classify known elements and describe their properties in detail, but managed to accurately predict the existence and properties of elements discovered many years later. Even though the periodic table was framed more than a century ago, it still remains the most important single correlation of chemistry, permitting us to deal with the great variety and diversity of nature.

The diachronic aspect of Mendeleev's table is as important today as it ever was. If we view our future as a periodic chart, then we can begin to search for ways to enrich it and fill all the empty spaces with new values and a constructive vision. Modelling the periodicity of chemical properties in vertical and horizontal patterns, led to the discovery of the order and clarity of science. A vertical and horizontal classification of priorities in society reveals their interdependence and can lead to a harmonious future.

Electronic structure, which forms the basis of the periodic table, conveys the concepts of energy and potential. Similarly, priorities in society need to be classified according to their positive contribution towards uplifting values and human potential. This potential can be applied to

enrich our society with a better understanding of biological and cultural diversity. Waves of energy and light, waves of communication, can bring us together as a global community to decide on a joint pathway for the future. New ethics have to govern our action and thought, in order to make full use of the benefits of economic progress and eliminate destructive trends.

Today, we have the wisdom to control economic progress and we should apply it to its full extent. We can use the knowledge gained to improve our quality of life and improve the world for the generations to come. We can fill all the empty spaces of our periodic table with the beauty and wealth of cultural and historical diversity and build a positive framework for the future. Once economic science acknowledges the urgency of re-evaluating its role with reference to a long-term, global financial policy, it will be more efficient in answering to the challenges of the next millennium. Once business leaders acknowledge the urgency of protecting bios, they will be more successful in fulfilling the needs of the enterprise, the community, the country and the world.

Dr. Agni Vlavianos-Arvanitis founded B.I.O. in 1985, after having dedicated over 20 years to teaching and research in biology. In 1990, she launched the International University for the Bio-Environment and, in 1992, a campaign for Bios Prizes and cease-fire during the Olympics. A recipient of many high distinctions, she was elected, along with M. Gorbachev, N. Mandela and M. Strong, Honorary President for Life by the UNA of Sri Lanka, and is also an Abdi Ipekci Peace and Friendship Prize laureate. She is Vice President of the International Bioethics Society, Member of the *Journal of Cleaner Production* Advisory Board, Member of the Board of Trustees of the Uganda National Foundation for Research and Development, Vice President of the UNESCO-MAB Hellenic National Committee, Commissioner on the Global Commission to Fund the UN, Corresponding Member of the Pontifical Academy for Life, Member of the New York Academy of Sciences, the International Academy of Ecology, Human and Nature Safety Sciences, the Hellenic Philosophical Society and the National Society of Greek Writers. Author of poetry books, she is also Honorary Professor of St. Petersburg State University for Plant Polymers and *Doctor Honoris Causa* of Mendeleyev University. In 1995 she was nominated for the Nobel Peace Prize, a nomination renewed in 1997, 1998, 1999 and 2000.