

## BIOTROPICS AND THE FUTURE OF HUMANKIND

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Latin America is, more than anything else, an extension of the values of Ancient Greece, transmitted through Imperial Spain. Our notion of the State was inspired principally by the Greek polis. And our democracy, still far from perfect, always looked to Aristotelian ideals for support, or indeed sometimes to Plato's Republic. There have been many failures but, on each occasion, we yearned to return to the paths of democracy looking to the paradigm of Ancient Greece, which for us has never died. And it is even more alive today, now that the Biopolitics International Organisation has given classic humanism a new relevance. We were all taught how Aristotle arrived at his concepts of politics and philosophy through his studies of living organisms. Through this interdisciplinary vision, we also learned the real meaning of systematic interdependence. The history of Latin America, whether in its finest hours or at its times of deepest crisis, has been a demonstration of that unavoidable relationship. The pre-Socratic philosophers, as well as Socrates, have inspired many and I believe that our Academy is true to their philosophies. We are aware that all schools of thought are drawing more from the original Greek sources every day. Our exploration into the origins of the universe and life, and our research into the nature of things, always lead us back to the dominance of Greece, two and a half millennia ago. The empires of the West have fallen by the wayside, and the old ideas of the Greeks have come back to life which is one of the most important signs that life lies in biopolitics.

Our perception of the meaning of bios suggests that we should not feel alien to the ideals of such a mighty project. Beyond a false anthropocentrism, there is the universal perception of the intelligent harmony among living things.

The tropics are synonymous with life. Life is more than human existence. It is a chain with origin and evolution in all species. The tropics, contain the most links in the chain of life, spanning millions of years. Biodiversity is, by nature, complex and multidisciplinary. The inescapable law of connection between living species tells us that we cannot abandon our responsibility for the preservation of the biological chain. If the tropics stay alive, the whole planet will stand a better chance of doing the same. If the tropics die, or life in the tropics deteriorates, the rest of our planet will quickly weaken. Perhaps the frontiers of the tropics are the last hope for life on earth. Therefore, there is probably no part of the earth's surface of greater interest to the six billion, or so, members of the human race. The latest studies on biodiversity in the world show that the tropics contain 50-90% of biological reserves. Yet this overwhelming fact has its tragic side: at the present rate of destruction, 10% of this reserve, kept intact for millions of years, will have been laid to waste in the next 30 years. The damage to this planet will have been irreparable. The same studies forecast that 25% of humid tropical forests will have disappeared by the end of this millennium.

The tropics have the strongest photosynthetic superstructure on our planet. They preserve the water and the humidity which secure the survival of large scale genetic banks. Baron von Humboldt, second only to Columbus in his discoveries of the Americas, told us two hundred years ago that South American tropics had all the potential to be the granary of the world. The tropics cover only 10% of the surface of the earth, but are home to three quarters of its living species. Mega-biodiversity is to be found in almost every corner of the tropics but, is more concentrated in certain areas, with Colombia and Brazil leading the way. In the case of Colombia, the concentration is to be found more in the neo-tropics, the high Andes, than in the palaeo-tropics of the Amazon Region. As one example of this, there are more higher plant species in the Colombian Andes than in the whole of the rest of the Amazon Region, which is at least twenty times the size. The humid regions of the Andes, covering only 0.2% of the earth's surface, are home to 6.3% of all known species of birds. In the bio-geographical "Pacific-Choco" region of Colombia, with its 13,000 mm (over 500 in.) of rain a year, areas have been identified with a density of more than 260 species of trees with diameters of 2.5 cm (1 in.) or more per 1000 sq.m. (10000 sq.ft.). In temperate zones, this density never exceeds a few dozen. The 1990 Report of the Development and Environment Commission for Latin America and the Caribbean gives a telling summary of the biological wealth of the tropics: "90,000 of the 250,000 higher plant species are to be found in the American tropics. If we suppose that 10% of these species have a medicinal value, 10% have industrial applications and 15% can be used for food, there would be 31,500 species to be exploited. At the end of the 1970's only 1% of the estimated 50,000 angiosperms in the Amazon region had been studied to determine their chemical composition. By comparison with those 90,000 higher plant species in the Americas, Africa has 30,000 and Asia 35,000. The diversity to be found on the humid flanks of the Andes is greater than that of the Amazon plains and accounts for the greater number of plant species in the neo-tropics, compared to the palaeo-tropics: this is the area in which we can expect to make the most important discoveries."

The biological wealth of Colombia and Brazil can be further illustrated in figures: it is estimated that Brazil has 65,000 higher plants and Colombia 50,000. China, Mexico, Australia and South Africa have less than 30,000. Sub-Saharan Africa, many times the size of Colombia, has 300,000. In mammals, Brazil has 460 and Colombia 380; in reptiles, Brazil 620 and Colombia 550; in freshwater fish, Colombia has almost 2,000 species, of which half are in the Orinoco basin; in birds, Colombia has 1,721 species, the highest number anywhere, and Brazil 1,622; Colombia has 407 amphibians, Brazil 516. Nobody has even tried to count the insect species but some scientists suggest that the count

could run into the millions in both countries.

Our lives as Republics started in the same era as Modern Greece. And, like Greece, we went through birth-pangs and crises. Today, Latin America differs from Greece in many aspects, as is only natural. The fact that Greece, a relatively poor country but one whose income distribution would be the envy of many, has joined the European Union, should be recognised as a potentially useful example in the process of integration of Latin America with the United States and Canada. Latin America is, perhaps, a sort of intermediate continent between an opulent North and a largely poverty-stricken South. Despite this, the contrast between rich and poor within our own borders is much starker, and possibly more inequitable. An increasingly large number believe that such a situation cannot and should not continue.

"Biotropics" is possibly the best scenario for this new ethic of our society in our wish to return to the social and ethical values which ruled the life of Ancient Greece. At the same time, we wish to reconcile ourselves with Nature, which has endowed us a thousand times more richly than the rest of the world. Our mega-biodiversity offers humankind thousands of opportunities to preserve the biological chain. Tropical jungle conceals countless new forms of food and medicine, tens of thousands of plants offering an infinity of active principles which could be of vital importance to human health. The global supermarket limits itself to a mere twenty species or their derivatives, turning its back on the mega-biodiversity of the biotropics. The best prospect for development can only be made real through biological diversity. All these factors, and many more, bring us to adopt many points of basic identity with the Biopolitics International Organisation and its eminent Founder and President, Dr. Agni Vlavianos-Arvanitis. This is also the fundamental reason why the Club of Rome and the Santillana Foundation for Iberoamerica, through the former President of Colombia, Belisario Betancur, want to provide their enthusiastic support for holding, in Colombia the Ist Conference on Biopolitics and Non-Destructive Development, in 1996.

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