MORE ABOUT SCIENCE AND TRUTH

A few years ago, on the occasion of a paper published in *Interciencia* that demonstrated with precise altimetry procedures that the actual height of the highest mountain in Venezuela was different to that which had been assumed and taught as true, an editorial was written on the issue of scientific truth. We now return on the theme *a propos* of the extreme positions adopted regarding matters of great relevance to all humankind, as are the existing polemics around climatic change and the exhaustion of energy and food resources.

On that occasion the issue was a clarifying matter over which there was no polemic whatsoever. It was the result of the discovery of a truth that was different from the one assumed up to that moment. In contrast, the present issue is a highly polemic one due to its complexity, to the many details still to be learnt and, above all, to the many institutional, national, commercial or other interests involved.

It is not strange that, when such interests are in play, diametrically opposite views are generated in relation to one and the same problem. In matters of political, and sometimes social, relevance it becomes difficult to elucidate reasons or to be objective. In matters of technical nature it should be easier; however, it is not always so. Reality is not always univocal, even if we want it to be.

It is recognized that climate is changing, but it is difficult to be univocal as to the existing difference with changes that took place in the past and even more so as to the causes and the long/term consequences, where arguments and their sustenance are diverse and powerful. Even worse is the situation regarding the exhaustion of current energetic sources since close to 80% of the energy consumed in the planet comes from non-renewable sources, particularly fossils.

While the discrepancies among specialists regarding the temporal course of the dwindling of sources remain of importance, more so are those relative to the ways how to overcome it and the consequences they might have. The generation of energy, whether by traditional means not based on fossil fuels, such as hydropower, nuclear or geothermal energy, or with the new alternative energies such as the wind or chemical ones, has supporters and detractors, pros and cons. A closely related area, that of the energy requirements for automotive transportation is particularly polemic.

Fuels derived from organic matter, bio-fuels or agro-fuels, are seen as possible partial substitutes for gasoline, but their production in significant levels requires great extensions of agricultural land and their production and use are contaminant. For those worried about environmental preservation, the posed dilemma is 'agro-fuels *versus* climate change', while for those concerned with land availability and enough accesible products to feed mankind the dilemma is 'agro-fuels *versus* food'. For others, depending on where the emphasis is placed, the matter is 'food *versus* climate change' and not 'food *versus* fuel'. At this stage of the game there is plenty of science but many truths or points of view remain to be elucidated.

Confrontations take place and the search, studies and results, as well as arguments developed under univocal approaches threaten to extend endlessly. Science and technology, economics and politics must look for joint ways to achieve the means that will allow future generations to have a planet where to live, with enough food. Not to attain this goal will lead, sooner than thought to the disappearance of our species.

In order to achieve an adequate diffusion of the research being carried out, as well as to help in the development of an informed and conscious citizen who could influence his or her own future, scientific journals, without taking sides in favor of one or another position, should be a means of expression of all points of view, provided they are approached with the needed rigorousness and neutrality, which is not always the case.

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