

## CHALLENGING REASON: HOW DO YOU COMMUNICATE SCIENCE IN A MAGIC COUNTRY LIKE MEXICO?

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### **Summary**

How can a scientific culture be fostered in a land possessed by figments of the imagination, an ancient, multicultural nation immersed in the animistic, prelogical thinking? What should a novelist do if he wants to promote an idea of progress in the society in which he lives? Perhaps the rationale that guides him is that having a certain level of democratic life is not enough to guarantee the existence of a new scientific culture.

**Key Words:** multiculturalism, scientific illiteracy.

### **Text**

In *The Magic Mountain*, Thomas Mann introduces a strange character, Leon Naphta, who runs up against Settembrini, an advocate of the Enlightenment and a member of an "international league to organize progress." Naphta is a Jewish convert who later enters the Jesuit Order. Naphta does not believe in progress, peace or humanitarian action. In his messianic frenzy, he preaches the virtues of illiteracy. Against "western" ideals, professes a passivity that he himself describes as "oriental". A sort of terrorist mission aiming to restore a pre-modern world where work had a virtuous value and action was only the prelude to contemplation. A world in which all that mattered was fate, a world remote from the "satanic kingdom of money and its business".

Today, like Naphta, Mexico is experiencing a vulgar materialism. Faith is the organ of knowledge, although the immense majority of young people, both in the cities and in rural areas, do not seem to believe in anything special, and they devour everything with parsimony and implacable speed. When we walk on the surface of volcanic soil, we seem to hear the moans of the rocks on which we tread and we try to apologize for our impertinence.

Mexico was a multicultural country even before the arrival of the Spaniards. Many centuries ago the people of Mesoamerica were trading with the locals who

already inhabited the southeastern coasts. The cultural shock with Europe in the XVI Century produced contradictory sentiments both in the peninsula and in the new colonies regarding the role of the intellect. The new American culture dedicated itself to the revindication of scholasticism, seeking to see Copernicus fall, vanquished by Ptolemy. Today, this can still be seen, for example, in the State of Oaxaca, a region in fourth place in the world in biodiversity, where 16 different ethnicities still live, each with its own language; some of their members also speak Spanish. Nevertheless, Oaxaca is one of the poorest, most backward states in the country, and the emigration of its Mixtecan Indians in search of the American dream is one of the most numerous in recent decades.

Anyone who is concerned about the perception citizens may have of science and technology, such as those who themselves are the communicators, should also know the settings in which these disciplines are conceived. Without an orderly understanding of humanity's social history and its cultural and religious manifestations, it is useless to try to communicate scientific knowledge. It is the best way to expose the bridges for communicating with the public to the corrosive agent of twisted meanings and semi-ignorance. As we all know well, in that case it is better to be completely ignorant.

That is why I launched into the adventure of clarifying substance in a highly surrealistic country where prelogical thinking predominates. I must confess that from the beginning, I knew that writing about science for the most influential media in the country would hardly be enough to ensure the application of a code of values in my works or those of anyone else. Fortunately, the opening experienced by Mexico at the end of the 1980's, following the irrational repression in 1968 and 1971, allowed me to establish a code based on more profound, impersonal issues that have to do with the manner of approaching a scientific topic, beyond just wanting to explain a disease or in order to entertain those who can understand the strange, noble ideas that are derived from the discoveries of science.

Thus, I did what many years later Bruno Latour and Steve Woolgar would call "lab life". I had to study every scientific subject in order to be able to go back to the researchers to ask questions that would not only be relevant but truly profound, seeking to achieve the "difficult simplicity" to which St. John of the Cross and many other writers have aspired in practicing the literary craft, always directed towards an audience.

It is said that a society that does not produce much science cannot communicate it well. What matters to us is not cosmetic and corporatist bias but encouraging the consolidation of a scientific culture. Not only because we are curious human beings, but also because some of the most interesting ideas and most stimulating findings have to do with science. Even for reasons of survival. Democracy by itself is not a guarantee of anything; it must proceed very quickly to become a meritocracy so that the social order will not be broken, and so the Naphtas of today will not have arguments for thinking that science is a faith, just like the rest,

although stupider and more evil than any other. As the physicist Jorge Wagensberg said, “Eating and learning go hand-in-hand, not one ahead of the other.” So, if we want there to be wider, more alert communication capable of building the bridge, the first thing there must be is an historical stimulus for scientific research, and even more so for education, and the rest will follow, as the Bible says.

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