

Science and technology are different things!

To think and to know represent the essence of men. Thinking is a prerogative, a right and an obligation that is exclusively human. Knowing is the reason why we exist, and it is not by chance that in Brazilian Portuguese “to know” has the same etymological origin as “to taste”.

True knowledge reaches the reason and the cause of things, not only the things. As man endeavors to exceed the limits of simply knowing something — by means of thinking and reflecting upon that — the basic elements of scientific production emerge: criticism and objectivity.

Science is not the only way to discover the truth; we also have empirical, sensory and other types of knowledge. But scientific knowledge is different because it analyzes, explains, induces and applies the natural law. For being programmed, methodical and sequential, its repeatability is certain. Science necessarily produces public knowledge and provides results that may be repeated by anybody, anywhere. Science is connected to finding the truth, producing new knowledge, but it is also related to the obligation of disclosing it. If it is not public, it is not science.

Science and technology are always together, but many people are not able to distinguish the difference between them, some even think that they are synonyms. In Science & Technology, or simply S&T, we usually find the letter “&” between them. As if they have nothing to do with each other, but they do! Take the Ministry of Science & Technology, for instance.

Technology is connected to the practical application of knowledge and it is associated with progress in daily life, which is a result of scientific knowledge. Technology is also related to manufacture and feasibility as well as commercial, industrial and strategic interests. Science may be useful to technological progress, but not necessarily, as it is committed to knowledge on its own. Technology may be useful to science progress by developing new devices, equipment as well as observation and analysis techniques.

The difference between science and technology may seem subtle, but it is not, and every person could be able to notice it. The progress of mankind depends on science and production of knowledge. Technology, however, is our working tool.

Why does science have to be public while technology does not? Technology is connected to patents and commercial trademarks. Technology is related to the industrial and business world as well as to money. In other words, it is connected to power, profit and the supremacy of some people, cities or companies over others.

When a researcher, scientist or inventor publishes something, he no longer has the right to apply for patents, neither register any brands or other financial and material benefits. Once knowledge has been published, it enters into the public domain. Santos Dumont did not patent the airplane, neither the watch; Röntgen did not patent the X-ray generator, but Nobel patented the dynamite and made a fortune with that. Knowledge that is produced and kept to and by whom it was produced, is useful to itself, to generate profit and power.

A country that wishes to be influential, dominant and wealthy stimulates application for patents and trademarks. There are some international standards used to classify a country according to the number of patents and trademarks it has got. The more patents and trademarks a country has got, the more powerful it is considered among other nations.

When making medicines, cars, guns, toys, computers and nearly everything, a country needs to pay for the rights of patents and trademarks. The more Brazilian researches, companies and laboratories retain the rights over patents and trademarks, the more money we will receive from other countries. That means power and domain. Whether it is good or bad, that is another story. But that is how it works!

In Implantology, when reading a published article, the reader must question its scope — or intention — whether it is scientific or technological! Does the analyzed work display knowledge or it reveals an opportunity for sale or to display a work, protocol or a product? Science and Technology must walk together and have to be licit, but we cannot think that they are synonyms; on the contrary, they are different processes and we must bear that in mind. Let’s think about that.

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