

Rethinking the relationship between science and politics

This ambition aims to a medium- and long-term vision looking at science in a conscious way, as a process of cultural and democratic development because it travels at formidable speed and, due to politics, often unable to respond effectively and timely to ongoing changes.

by **Fabio De Furia, President of the Miami Scientific Italian Community**

In my opinion, the relationship between politics and science is both a goal to pursue (in the respect of the roles) and a condition to examine and understand, —a condition, it should be noticed, rarely fulfilled since it depends on several problems that require the reorganization of personal and social values.

During the time of the Coronavirus pandemic, contemporary societies have felt vulnerable in their ability to find a solution that might be easy to understand but difficult to implement. The need for a strategy or rather of a vision and a mission is emerging in order to transform the demand for dialogue into a common path capable of satisfying not always concurring interests and, most importantly, also capable of operating in different countries —from the United States to Europe and from Asia to Africa.

I have no doubts; science is the only alternative we can rely on in order to face moments like this.

The scientific evidence and methodologies must be credible and convincing. They must provide practical solutions to current political problems and also be adequately presented in order to attract the interest of the politicians. These are conditions rarely met practically and that must find applications both in the indications (which make the proposed legislation under consideration by a legislature - or bills - legible), and in the enacted laws that make them applicable.

In fact, the laws, which have the ability to influence and organize several social and economic contexts, must be open to the evolution of science.

This is to avoid that the dialogue between science and politics remains inconclusive or - worse, specious. I am still convinced that the problem urgently arises for the future of many countries including Italy and the US.

Where should we start to strengthen and to rebalance the relationship? I would say we need to start from re-thinking about, and re-evaluating a single "keyword" that is easily found in every Constitution of any country in the world but that needs to be better considered:

Culture.

If we want change, we must begin to think that there is a strong relationship between research and culture.

An important role, in my case, is the one of the Universities, which remain the natural seat of research because they are able to combine the moment of human capital qualification, the

advancement of knowledge, and the development of innovation through relations with society and the economy.

Rethinking about the knowledge needed for the advanced training and for the flow of ideas represented by generations of students, is the foundation of the research in the most advanced sectors.

Currently, in our countries [Italy and US], the transfer of knowledge from the university to the civil society occurs through different channels; undoubtedly, the first and the most traditional one is the transfer through staff training. Teachers and researchers transfer knowledge and methods to their students who make the most of it in the civil society. The second channel, increasingly important in advanced societies, is the application of innovative ideas developed **"for"** and **"through"** the research. The transfer often occurs with the creation of small spin-off companies from the research.

Finally, in sectors such as medicine or genetics, the same scientific knowledge that is gained through research, can find application in the short- or mid-term. It is an innovation obtained **"starting from"** the research. Even in these cases, the transfer takes place through spin-off companies or with the acquisition and transfer of patents.

In Italy, for instance, politics, can mobilize resources that attract interests and that promote economic success by promoting the development of culture and research. Even though many agree with the bill (it is difficult not to agree with the fact that culture and research are structurally united), the difficulties arise when it is necessary to combine the decisions with the resources available, and also when the course of action must be planned for the medium and long term like the emergency has dramatically shown these weeks.

It is essential that there will be a widespread and continuous research fabric and that the great peaks of research will be finalized and supported. Today, both are missing (widespread fabric and attention to the peaks), but this cannot be solved with one measure only. It's necessary to structurally increase the funds, so that all at once, the scientific work will be recognized and valorized as a tangible heritage.

Intangible capital is today the most selective resource in international competition, evidence of the relationship between research and GDP and evidence of how the research is an economic and not only an intellectual resource.

I have always been convinced, and not only in this situation, that **research has a fundamental civil function and we all should reason in these terms; research is needed to change a country in its identity and social cohesion and to create a widespread consensus that censors any past practice.**

To our young people, who today are on the front lines against an enemy better known thanks to their valuable work, we must strongly say that their effort is also needed to create a more aware and more civilized country.

We need research to be more civil, more modern, more capable of telling our young generation to stay in Italy: "your country needs you!"