EDITORIAL

Discussed and greatly debated: the process of globalization in economics, science, culture

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Globalization has always existed ...

Globalization has always existed. The economic systems, techniques, and cultural models we have seen emerge in one context, to multiply and spread throughout the planet today, were likewise transmitted in the past. Greece, itself conquered (*Graecia capta*), "conquered" the Romans with their wisdom in the arts and sciences. The Greeks themselves had inherited this knowledge from the earlier Aegean civilizations which, in turn, had drawn from the Egyptian, and Assyrian-Babylonian civilizations. Rome, in turn, spread this heritage throughout Western Europe and the rest of the subjugated world. Styles, images, and artifacts have always traveled in space and time, to all latitudes, contaminating cultures. Globalization, as we know it today, is just a repetition of processes that have always taken place on a wider and more accelerated scale thanks to current means of transport and communication.

What is peculiar to our age is not a phenomenon that is inherent in human nature, that of sharing, but rather the fragmentation of knowledge, a sectoral vision which, since the industrial revolution, has become the only way to think about reality. No one doubts the advantages deriving from the division of labor, a *modus operandi* that from the economic sphere has progressively entered the intellectual one, becoming a *modus cogitandi*. Today there would never be a Galen, the physician who was also "the most important of the philosophers". On the other hand, we have many Robert Kochs, hyper-specialists involved in ever-narrower areas and competencies.

But alongside the conquests (including the eradication of tuberculosis (to stay on the subject of the previous example), hyper-specialization has led to just as many aberrations. In the industrial field, for example, until a few years ago, abnormal quantities of artifacts (in plastic, for example) were produced, that were of a precision, detail and efficiency unknown in the past. But we forgot to consider the impact all this would have on the environment around us. What can be done now? In the intellectual sphere, a scientist who studies organic chemistry may not know much about computational chemistry and know completely nothing of astrophysics; just as a contemporary art scholar can relatively know about the archeology of Magna Graecia and have never read of paleontology or psychology. Of course, no one doubts that mastering theoretical chemistry for the "organic" chemist or the archeology of Magna Graecia for the contemporary art scholar would be a remarkable advantage, but the problem is that the didactic system does not necessarily require it.

We have come to the end of the line as regards this way of thinking. The paradigm of individual hyper-specialization, which all together becomes collective, no longer coincides with an improvement in everyone's standard of living. Having a world population of seven and a half billion people and increasingly less need for large-scale labor, the most obvious results of work-related progress, is a paradox that no economist or sociologist has yet been able to solve.

The truth is that complex problems such as these need to be addressed today using a "non-fragmented" mentality that takes into account many aspects, not least thinking in a temporal perspective that is not imminent. The world of knowledge, on a global scale and certainly in Italy, is no longer used to it. More and more polytechnics are instituted and fewer schools of thought. We continue to reward the specialist or the technician who climbs another step of the ladder that is leading us to the brink of ruin. No one focuses on the problem of forming minds capable of positioning the ladder, everything is focused on the technical know-how to produce increasingly more durable pins.

At the *Scuola Normale* we are trying to change course. The two soulmates, Humanities and Sciences, are trying to communicate more and discuss things together, believing that the paradigms of knowledge of the one and the other are not incompatible and the interaction between the so-called hard sciences and the humanities can be systematic. It is impossible to foresee the future. Our generation grew up in the belief that expansion on other planets was the immediate future. None of us ever imagined that thirty or forty years later, the future would be a computer in the kitchen or in your pocket, connecting everything and everyone. Technological progress is blind. What should be done is to learn to steer it and direct it toward goals that suit the community, extending the concept of global to the vegetable and animal world as well. Universities should feel this change of perspective as inescapable and it includes the evaluation system. It is not only those who produce more that should be rewarded, but also those who are committed to producing differently. Italy, home to the world's oldest university, can be the promoter of this paradigm shift and re-embrace the concept of global, or rather, universal knowledge.

...and continues to be discussed

The process of globalization has undoubtedly determined (but at the same time presents) aspects and consequences observed in the field of economics, science and culture that can be the subject for aseptic discussion, as well as being considered from a number of different standpoints.

The virtuous aspects, in economic terms, that are fascinating due to the creativity they unleash, reveal themselves to be of an entirely international nature due to the contributions they are able to catalyze from around the world.

In accordance with this creativity, globalization is, for society, "innovation" and "utility", in other words, the satisfaction of needs and business, which not only go hand in hand but, if well planned and conducted, can generate opportunities for all.

While the resulting message is both cosmopolitan and inclusive, present-day rhetoric considers the two previous aspects and consequent results to be irreconcilable. This is the situation, in consideration of the fact that globalization, by cancelling hopes of growth and development, humanity and beauty, has replaced the dictatorship of

algorithms, the sharing economy¹, including the quantitative easing² of the European Central Bank, and lastly the amount of 'big data'.

However, it is worth highlighting the limits and reasons that prevent modernity becoming one with the community and show that globalization can also be - in certain conditions - the result of a positive union for the whole of society.

The reasons for this are basically due to not being able to "build systems" or not being able to consider and evaluate the overall impact of globalization on people, on their relationships within the community and on the environment in which they live. This implies: efficient bureaucracy, non-punitive taxes, proactive financial institutions, a judicial system that works rapidly, a diplomatic network at the service of 'made in Italy' with the possibility of large-order contracts deriving from hotels and museums, e-commerce and other modern media platforms. The culture that a country expresses is also an integral part of the nation's economic-productive system, which includes innovative and scientific aspects.

How can the characteristics and peculiarities inherent in our country, and endemically and genetically in Italians, therefore, be ignored?

There are, in fact, several significant and emblematic examples in which, drawing inspiration from the presence of a cultural heritage that is unique in terms of both quantity and prestige within a world context, as well as from the landscape and historical centers of our villages, the image of a permanent Renaissance offering universal values may be proposed. This can be achieved through the work of entrepreneurs and managers of public affairs who show their willingness and efficiency, express their industriousness and social conscience and project hopes of economic recovery by enhancing cultural and natural heritage and social well-being.

For all this to continue and deploy its beneficial effects over time, at the moment positive results are observed, it is necessary to preserve and try to increase the competitive advantage over other countries, without conceiving the "made in Italy" label as having an edge on the competition. The business world, including culture, pushes ahead and thanks to digital media, amongst other things, is continuously evolving by questioning traditions and established positions. This refers in particular to the excellences that Italy can boast of in Europe and throughout the world. It refers to traditions and identities that find expression and identify themselves in the various sectors of food and wine, design and manufacturing, as well as in the field of cultural and environmental heritage.

It is especially in this field that the vision of a globalized world needs to be understood and realized for it to act positively in its protection, enhancement, prevention, promotion and communication, using the technological innovations that are constantly emerging. This stems from the fact that technology is evolving more rapidly than our customary mental processes and that, to be competitive in the years to come, it is necessary to renew cognitive paradigms.

Some suggested guiding principles that may be adopted by both individuals and institutions include: risk that must be replaced by safety, experimentation instead of

¹ This is an economic model that refers to a set of exchanges and sharing of material goods, services and knowledge, as an alternative to classic consumerism. It starts with the real needs of consumers, able to cope with the challenges of the crisis and promote more conscious forms of consumption, based on reuse instead of purchasing and sociality rather than property.

^{2 &}quot;Quantitative easing" is one of the ways in which the Central Bank creates currency and its entry into the financial and economic system through open market operations.

planning, design that not only focuses on the cultural object and / or artifact, but also on Its impact within the networks of individuals and institutions.

In accordance with the above, as Giulio Giorello, a philosopher of science says, "knowledge has a rebel soul", it should be emphasized that the advancement of knowledge introduces significant breaks with established beliefs in the production of goods and services, and particularly in science. Those who innovate are winners because the exception does not confirm the rule, it becomes a new rule.

It should therefore be acknowledged that innovation, far from being soft and episodic is, instead, convinced and permanent. It is the result of interconnections between scientific research and technological applications, freeing itself from prejudices, resisting and standing up to unidirectional theory and evaluation criteria and consequently revisiting the certainties and habits of the past. This is how, it reaffirms its profound extraneousness to the historically mainstream dogmatic approach which claims to plan scientific development based on lesser known instances that are more progressive, but in a desired system are inevitably destined to become the priorities laid down in previous years.

This "new" knowledge in science therefore has a rebellious soul that assumes different tones and different evaluation criteria at a practical level.

In this respect, it would be desirable, in relation to the cultural heritage that represents an indisputable peculiarity for Italy with its 53 protected assets on UNESCO's world heritage list, to exhibit, narrate and enhance them in a globalized spatial and temporal dimension, as is already the case, in some countries at an intercontinental level.

A "global museum" is what is needed for today's increasingly connected world. The museum offers a response to the change in public sentiment, in other words it has a national and global responsibility: a museum of the world for the world. Its central theme becomes a link between cultures, not only through exhibiting works of art, but also by showing the life of communities within the universe and therefore of cultures. It is not only a political project, it is also the response to a rapidly changing world. The museum must therefore play its part in illustrating the connection between cultures and our shared humanity and, in this way, contribute to narrating the interconnected history of the world. The objective is to continue to consolidate our place in the center of global culture by understanding and encouraging the understanding of changes in the world. In narrating the story of different objects, the museum will enable cultures and historical eras to be compared. This implies a new narrative for collections with an emphasis on the interconnection of cultures.

However, the leap into cultures is also technological. Digital technology will play a much greater role in order to better understand the interests of visitors and to create guides and "made-to-measure" tours. Digital platforms allow enthusiasts in all corners of the globe to interact with museum collections, giving rise to social media coverage. It is now possible to connect with galleries and museums anywhere in the world through the use of mobile devices which use digital technologies, such as virtual and augmented reality, to give visitors a more memorable experience.

As highlighted in this example, the realization of the historical-technical Journal "Conservation Science in Cultural Heritage" at an intercontinental level is emblematic. Founded in 2001 at the University of Bologna, it publishes scientific papers by researchers and schools of different origins and from various countries, in hard copy and online in "open access", meeting the requirements of internationalization with its Sci-

entific Board and with the involvement of Universities, institutions at an international, as well as national level.

Following a series of quality certification by Entities and Organizations distributed across the continents, it also performs the function of training the professional figure who must properly address and help to resolve the many issues related to the various scientific areas of a historical-humanistic, technical-experimental, social-management nature in the cultural and environmental heritage sector. It must be highlighted how the "quality" recognized by the afore-mentioned Organizations, has contributed decisively to the knowledge and dissemination of the Journal, in its digital version and the ensuing asymmetrical conditions.

This means that the use of digital technology has positively impacted Journal usage. It is read, evaluated, judged, and used by the readership, not only to publish their own research with consequent dissemination and personal achievement, but also for self-teaching and training, by providing a 'reference' for themselves that is reported and transmitted globally. It is equally true, moreover, that the Journal's appearance has, over the course of its sixteen years, changed and renewed its editorial guise. It has also helped to increase its dissemination and will continue to do so in the course of time because, in an increasingly unpredictable and rapidly evolving world, in the field of science and, more generally, in culture, creativity is a decisive factor. Creativity, as initially emphasized, is synonymous with utility and innovation, and in this case too, is synonymous with a change that is in line with scientific knowledge and technological progress.

The White Paper on Creativity, published by the Ministry for Cultural Heritage and Activities in a Ministerial Decree of 2007, reports: "Creativity and culture are an indissoluble combination, a successful mechanism that can place the country in a strategic position in the international process of globalization ".

To conclude, a reference must be made to the first global pope: Pope Francis, who sees the Church as a "magnifying glass" centered on the suffering of the poorest. This accentuation is accompanied by an invitation to leave ecclesiastical enclosures, to meet, to communicate the faith, giving absolute priority to the so-called "non-negotiable values": ethical values resembling natural law. The Pope points to a Catholicism of the people, not to a cohesive Catholic minority: he spiritually and humanly wants to fill the voids opened by globalization. This is the challenge of the first global Pope to an immensely changing world: a wide, merciful, attractive Church, starting with the poorest.

This is emphasized by Giancarlo Elia Valori:

"Frances' church in this perspective changes its model of evangelization entirely. In a few words, Catholicism today plays out its new global role, also as a winner of globalization, in favor of all peoples especially for those countries and peoples who are losing the game. Pope Francis' Jesuit training has greatly influenced this desire to transform, on an equal footing for all, the Church of Peter into a Church, that is, also physically, universal. Never again should it become identified as *part of the West*, but as the suffering Heart of Christ throughout mankind".

There are others who believe there is another model of church that gives priority to traditional values: a national-Catholicism in which national identity should stem the flow of global patterns, Muslim immigration, and European Union parameters.

Ultimately, two concepts and positions which, with the innate respective truths each possesses, hold within them both spiritually and faithfully, the good of everyone as the aim of their mission, addressing both believers and non-believers.