

THE TECHNICAL BACKGROUND OF GLOBALIZATION

Éva TÓTH

Department of Philosophy and History of Science
Technical University of Budapest
H-1521 Budapest, Hungary
Phone and Fax: 361 463 11 81

Received: Dec. 10, 1998

Abstract

The technology, along with the scientific development behind it, overflows the country, limits, propagates and takes along the cultural background needed for its use. Let's clarify that beside the political and economical globalization, there is a technological globalization too. The economical and political globalization is built on this situation. The widely defined globalization built on technology, is tuning into an inevitable reality. How is it going to be, depends on the political and economical methods and trends.

Keywords: globalization, regionalization, interests, politics, ethics, technology.

August 1945 – moment when the first atomic bomb made its destruction – not only the milestone that marks the political life and the history of the technology utilization, but the beginning of a crisis that will affect the whole world for a long period of time.

In 1946 appeared an essay by the pen of those physicists and soldiers, who participated in the technological experimentation or the organization related to the production of the atomic bomb, commenting the characteristics and changes within this crisis. The title of the book from our point of view is very important. *One world or none...* Out of every study commented by the book irradiates that, with the birth and utilization of the atomic bomb, all the international relations may or must change. If the human beings who are blinded by the bewitching of power, can easily get an armament that's capable of a huge destruction, the dismemberment of nations and the hostility turn impermissible. The authors of the book propose the foundation of international organizations to control the institutions related to scientific life and technical development, as well as confederations with rights to guard the military situation of all nations.

The 'American Atomic Physicist Association' added a synthesis to the book in which they characterize the upcoming world in three points. In the first point, they talk about the crisis, more likely an economical crisis, which is a very long process in which no important principle means the same thing as before the explosion of the bomb. All our values change, not only the partial or regional interests will be important, instead of them the goal of a

global survival will be and this will turn into the condition for the regional life, too. In other words, the goal is not to use the atomic bomb to decide over territorial limit discussions, more likely is to elude that anybody ever makes use of an atomic bomb. Making use of some military expressions, they establish that defense and prevention, the war, the rescue, the contents or consequences of a disaster, as well as the methods must change, since their meaning is different by now, by the era of the atomic bomb. A moral and a cultural crisis takes place as well, which roots are to be found in the same change of values.

The next period in the life of our world will have another important characteristic, because problems emerge in a global way. The consequences of new scientific results or the latest technical solutions cannot be closed behind the barriers of country limits, not even for a short time. The results and the consequences will spread around the world, ordering all events, towards the standardization.

The third point or prediction is related to the role of politics, since they thought that the importance of politics as a peculiar controlling regime of society will grow. This way politics will take a wider extension, its regulative principles and methods will reach social groups in which they have been in the background until now. On the other hand, in the delicate territories politics seem to play a determinative role and not only a regulative function.

The facts explained before are related to each other. The change in role of politics can be tolerated only in a global world, to this way harmonize the regionalization and the globalization. And only in a global world is not an utopia or idealism, a cooperation, mutual and extensive depending, described by the first point.

This prediction was given for a long time, and now fifty years later we can say that the future sketched by those characteristics is turning into reality. From some points of view, lots of things happened, the role of politics is bigger, the predicted crisis covers a biggest area, and maybe it lasts longer than they thought, the signs of globalization are obvious and significant, etc. From other point of view for example, in the organizing intercourse of globalization and regionalization, only a tendency can be seen (somehow strengthened), out of the picture predicted by the atomic physicists fifty years ago.

How these technicians, who twenty years ahead could not know much about the world's economy or the global problems, could give such a perfect picture of the future, which we think are very important elements of the future. The answer is, because there was something that nobody knew better than they, the results of technological development and knowledge and of which they could see that it was not going to be used only in the military domain but in the civil world, completely transforming it. The researchers, whose articles can be found in the book titled *One world or none* knew about a technical achievement, with effects of which only they could think about, the atomic bomb. History demonstrated, that the country

limits are no obstacle for the propagation of technical results, – they did not stay inside a limit, if they could be utilized somewhere else. The special environment in which the atomic bomb was prepared and then used, clarified from the first moment, a knowledge and technological achievement for the whole humanity as well as a problem concerning the whole humanity, too. The scientists thought, this technological results are enough reason and condition to start the process of globalization around the world, in which every nation cooperates to create those necessary conditions to live in peace. It means they were thinking about a conscious political globalization.

In the last fifty years, the technical development started to grow with a rhythm never seen before. The knowledge obtained from the researches related to the atomic bomb, were used for the construction of atomic power plants. This way, nuclear energy was utilized for a really peaceful goal, in a world filled up with illusions, with a cheap, environment friendly and big energy source. This era was heroic and full of inspiration for big creations, this lasted ten or fifteen years, but then we thought, Bacon was right, saying that the technical development hides the secret of human happiness. Later on, all the environmental problems and the big cost of nuclear power, turned to light. The process was irreversible by then, lots of agricultural establishments and industrial conglomerates were built with the idea of a low cost energy source and the services related to it. Nuclear plants were being built all around the world, first spreading the illusions and then the crude and expensive reality. This way, in the United States, as well as in the rest of the world, grew the amount of disposable energy and everywhere was/is necessary to confront the problems that come together with the functioning of nuclear plants, together with the problem of manipulating nuclear waste. This meant the beginning of a cooperation around the world, to make researches related to the security and manipulation of the nuclear plants, the disposal of nuclear waste and to grow the conscience of humanity, to be more observers, concerning the problems related to nuclear plants. Globalization is not restricted to the domain of results, it takes place as well in the way people react to the mutual problems, regarding the acceptance of technical innovations. In a technical language, user of the products; with an economical cant, the consumer is beginning to behave similarly in the whole world.

For the modern specialists, managers there is a task, farther away from organizing the industries internal work, they have to develop a new way of keeping contact with the consumers or users. They had to work hard, in finding the right production techniques, towards a consumer oriented industry, in which consumers are the actual creators and users of the products. This way emerged a huge industry, the propaganda industry, which contributes tremendously to the process of globalization.

The presented example, sketch of a process, the technical development of the last fifty years, did not mention country limits. This fast growing industrial and agricultural development, sweeps away the political limits

very efficiently, without respecting them at all.

Let's see briefly a well known example! The automobile is more than a hundred years old, but diffused around the world, in the last fifty years. What is the meaning of the automobiles, from the point of view of globalization? After the right market studies and design work, the cars are produced and have to be sold, because only a mass production can be really economical, with the biggest possible production series, they cannot limit their sales within only one country. The cars taken to a different country naturally take along the need of the infrastructure required for their use. For example the desire of consumers to have their own vehicle; after all, society did all the necessary to offer me the possibilities, it depends on me now, to make a move towards owning a car.

The automobile as independence, as the symbol of liberty, has been really successful in all societies. And nobody can negate, that the high cost of it could be seen from the beginning, for the individual and for society. Some societies tried to stand up against this temptation and stop the propagation of automobiles, while protecting themselves they were preparing their debacle. They tried to isolate themselves from the impact of these worldwide events, like the automobiles propagation, and this was precisely their failure, proving once again the movement of technical development over all country limits.

The automobiles arrive to every country on own international highways and create the required conditions to function, and all of that with international quality standards, since the only possible way to give them the proper predestined use, is offering good quality services. There is a necessary road quality standard, good fuel and gas station chains, mechanical services, etc. Not only the cars come in through the built roads, along with them there are people who created them, who use them, and they bring along their own requirements and habits.

The roads open the country for the world. They are like a communication network, in which the travelling people and goods are the ones that transmit all the information. We live the same way, buy the same products and create the same life conditions for ourselves, as other people do in other countries around the world.

The technical development may run into only one barrier, if the society does not accept the new products, because of the conditions set, like the folklore, costumes and/or values they have been made for; and don't like the same items preferred in other segments of society, because they were molded for specific preferences. This barrier, as we have experienced, does not exist, our society absorbs all the new things, like a sponge; the infrastructure conditions are absorbed a little bit slower. It is important to mention the every time faster and better acceptance technology is having around the world, thanks to the services and conditions, that are the key to the events going on in the world, which can be felt in other segments of society and may bring along some tragical consequences.

The main point is to recognize, how technical development contributes to the globalization of the world, utilizing the same resources in all segments of society, connecting them together in one functioning system. Together with this, it is necessary to let other cultures expand, permitting the dangerous possibility of standardization. Dangerous because the standardization arriving together with technology is aggressive, since the revolutionary force of rationalism is very clear. If we buy cars, we must build roads bringing in the 'same thing' standards, oppressing the unique individualism. The same roads, the same services, similar parking lots, equal gas stations and restaurants, with post offices, shops, benches, trees, lawn, etc.

If we build shopping centers, to simplify the shopping, at the same time we are converting the shopping into an event, giving people the chance for entertainment, distraction, eating something and even rest while shopping. This way it is possible to keep the potential customers in the shopping centers for a longer time and this way improve sales. But, if there are more cinemas, there must be more movies, movies that only entertain while shopping, movies without or not necessarily with any cultural contribution. We have no money to produce these films, and that again means the arrival of more foreign values to accompany our shopping habits (we think, they are foreign values), in the form of pictures propagating their own world.

Standardization is the goal of globalization, built on industrial development. Every day there are more and more industries producing for the whole world instead of one country or one region. For example, the expensive American movie business can only be productive, if all around the world millions of people pay to see them, or an automobile factory can only be productive if its cars are running on the whole world's roads. This is valid for the clothing industry, the food industry, etc. A product is economical, when it may be consumed by everybody, not having to design a special product for each person or group, the whole world must wear the same blue jeans, while watching the same film, use the same car and work with the same computer. The big worldwide industries, with their safe mass production and their low costs can easily oppress the small traditional companies, regional enterprises – propagating aggressively their cheap standard products, pressing the consumers of the world into the same consumer structure.

The risk of globalization is in the standardization. The question is, how to fight against it, and if we want to fight against it?

Before we answer this question, let's clarify that beside the political and economical globalization, there is a technological globalization, too. The political and the economical globalization are the advantage given by a situation, while the technical globalization is the constraint behind this situation. The technology, along the scientific development behind it, overflows the country limits, as we could see, propagates and takes along the cultural background needed for its use. The economical and the political globalization is built on this situation. The widely defined globalization, the one built on technology, is turning into an inevitable reality. How is it going

to be, depends on the political and economical methods and trends.

In conclusion, I think fighting against technical globalization is like swimming against the current, losing all the chances of finding our place in this global world. A global world is homogeneous, a big country will never be, at least (not even forcing it) in the actual situation that is far away from reality. In the future of this global world, the regions will always be present, having the same level of technical development, but representing specific geographic, economical, cultural units and mean, suitable communities for everybody.

Our mission is not fighting against globalization, or trying to stop the process of it, but to create a community with a special economy, integrated by free and creative people, and which is able to survive beside the world's other communities, conserving their unique characteristic. Not isolating them, letting their members use their knowledge to adapt, be part of the global world, in which they can conserve their characteristics, be free, conscious, have liberty and independence.