

■■■■■■■■■ **Progress Revisited**

Biology Meets Humanity (Again)

There are many ways of approaching the future, especially if we analyse the evolution of science and technology and their impact on our lives. There has always been controversy on the real contribution of science and technology to the arts and vice versa; nevertheless, the developments of intermediate practices, where it is not clear what is art and what is science, in favour of analysing and transforming our society, bring us to the most challenging positions in relation to progress. Though progress nowadays appeals to the efficiency of capitalistic production, it has a much more profound meaning in the way we would like to transcend the future. Pessimism and optimism govern progress, suggesting that it comes so fast that we don't take the time to analyse its moral and ethical consequences.

From Rousseau, who argued that progress in science and arts led to moral decline, to Feyerabend's concept of science as an anarchic process where *anything goes*, today it is probably much more interesting to say that progress becomes visible whenever science turns dogmatic and art questions it, urging for explicit freedom and radical ways of shaping scientific knowledge.

The Ars Electronica Archive gives us a very intense illusion of what the future meant back in the past. Though in some cases it is still difficult to judge today its importance in terms of scientific progress, we can recognize some of the first practices and approaches dealing with technology and society from a multidisciplinary perspective, in which scientists, philosophers, artists, among others, proposed innovative approaches to something that was supposed to be new. As in any reflexive and hypothetical activity, some of those visions are today considered accurate and some naïve; we also came to understand that the future doesn't necessarily depend on an pioneering idea but needs to deal with other variables, such as its dissemination or getting underway in a specific moment. The Ars Electronica Archive makes us reflect on how some innovative technologies and ideas have today become obsolete or been replaced just because of a techno lust fashion, in other words, there are always differences amongst scientific interests, artistic proposals and commercial applications.

After the Second World War, in the period usually referred to as the "Cold War," a series of innovative investigations was carried out that delivered the basis of today's new media technologies. Those advancements came hand in hand with a series of economic, social, media and cultural transformations that integrated technology as part of our daily lives. But without leaving off the most important discoveries in science, we had also to deal with the imagination and fantasies of human inventiveness. Incorporating those ideas in the notion of progress means that these are fundamental themes for the future transformation of society. Here is where art offers us the possibility to deal today critically with the future.

Simulations, which began in computer graphics and image processing systems, are now being used for a diversity of biological processes and applications that carry some of the most significant scientific developments. Once a nightmare, artificial systems are seen nowadays as our allies in dealing with diseases, poverty and a perfectible humanity—a new stage mastered by the artificial living forms and the social organisms.

As Vilém Flusser clearly pointed out, "Nature as a whole is a system in which information disintegrates according to the second law of thermodynamics. Human beings struggle against

this natural entropy, not only receiving information but also storing and passing it on (in this respect they differ from other forms of life). This specifically human and at the same time unnatural ability is called 'mind,' and culture is its result."¹ In this sense progress has to deal with two instances that confront each other: biology and society. The biological aim is the most basic and oldest, and it has existed since the first living creature appeared on the planet. As biological evolution developed, a new kind of evolution appeared. It was knowledge, and in human beings knowledge has the most differentiated characteristics in comparison with other organisms. Knowledge leads to society and to the belief of a "social aim," in other words, the necessity to transcend biologically (by means of religion, ideas, etc.). Though we have turned from a biological entity to a social one (social progress depends on science and philosophy), the purpose and common wealth of humanity is still divided in biological and social terms.

Paradoxically, we are getting back to our initial biological condition; by means of technology we can find out how biological mechanisms developed, meaning that we are re-discovering key elements that lead to the progress of society. To talk about humanity has been the main centre of intellectual discussion since the beginning of western thought (philosophy), and today we are dealing with ways to see the relation between those ideas (society) and ourselves (biology). This is where art and technology meet to discover new relations and to confront them.

This could give us, by the use of technology, a critical perspective, even before the proven demonstrations of scientific hypothesis, but understanding ethical issues that need to be confronted with scientific discoveries. It is a capacity that expands the classical explanatory domain of physics and chemistry. In evolution and art there is a similarity in relation to the effort of understanding the sources from free and combinatorial practices, but constrained in ways that introduce novelty into the system. Art as a way of evolution looks for a broader context to interact with life, in other words, defines a new way to think progress.

Digital evolution will give rise to the convergence of all fields, an emphasis on cooperation, and synthesis as the next cultural evolutionary step. This re-emergence of art and science will promote new forms and dynamic relationships so ideas can be shared across time and space to produce hybrid structures for a new type of society.



1 Flusser, Vilém. *Towards a Philosophy of Photography*. P 49. Reaktion Books Ltd, London, 2000