

Science is dead. Long live knowledge!

More research generates more results, but do we have more knowledge?

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Etymologically, science comes from the Latin word "scientia" ("knowledge") and it describes a process of information generation considered as useful for making predictions or better and clearer images for future.

The modern world (and modernity as its ideological description) put Science instead of God, and scholars instead of priests. It seemed to be almighty and offered humanity a land of hope to improve its own existence. Science is very close to the industrial and capitalist era, but this era is already gone. What about science? Can we have the same ideology for new (postmodern) realities? Is science essentially or only formally the same as in 16th – 20th centuries? I think its essence is modified and we need another ideology for our "post" times. It is considered (see Wikipedia) as a "continuing effort to discover and increase human knowledge an understanding through disciplined research". "Disciplined research" means not only a strictly ordered succession of steps in order to discover and increase knowledge, but it means a disciplinary approach and disciplined disciples. In ancient Aristotle times there were only a couple of disciplines (about 6). Nowadays we have almost 9.000! Is this dissipative process a useful one? If we share a certain truth/theory in thousands does it mean we have more knowledge? Or, otherwise said, do we really know more? I am skeptical about these things and I was happy to observe that unification theories are still constructed; even it is questionable if we may have a single/ unique theory.

Interdisciplinary approaches generated a lot of new border-disciplines (biophysics, biochemistry, mathematical linguistics, bioethics, etc.). This process will grow the number of disciplines and will make more difficult any attempt to unify human knowledge. Of course, all this analytical segmentation of modern science generates an impressive trend to synthetic postmodern science. In the 50s, Pierre de Latille, a French science journalist warned us that science closed its era of analytical science is over, and a new era of synthesis is coming. Indeed, in the 60s, transdisciplinary approaches appeared and developed worldwide. A Transdisciplinary Manifesto was launched globally and the synthetic way of obtaining new knowledge spreads rapidly. It is almost a normal fact that transdisciplinary thinking is often confused with interdisciplinary approaches, but little by little true transdisciplinary visions came out and wait for being evaluated and accepted. Some disciplinary researches put the word "transdisciplinary" in title just because it is trendy... But this generates a lot of confusion. In a way this is quite similarly with adding the word "science" to "management", to "socialism", etc. just it was trendy do so. The result was that both the "scientific" socialism and "scientific" management disappeared and the science is more and more questioned.

The ideology of industrial revolution is already old fashioned, but its core concept – science – continues to be used as nothing happened. Modernity is replaced with postmodernity, but science is used in the same or in very similar ways. Modern science was disciplinary, analytical and segmented (like countries, and nations). Postmodern science (just to use this word for the last time...) is transdisciplinary, synthetic, and more and more unified (like humankind in a globalized world). From this very reason I proposed many times to give up the confusing word "science" and to replace it with the word "knowledge". The (modern) science is dead, (postmodern) knowledge is already born and grown up! Transdisciplinarity is making a plea for unification not only of natural sciences and of humanities, but for the unification of these two separated fields of knowledge. (Nicolescu, 2008, pp. 13-23). Of course, old disciplines are very useful and necessary. The only thing to do is not to name any new discipline as "new science", just because this means to put an equal between "discipline" and "science" and to presume that any discipline is as scientific as any others.

On the other hand, the attribute "scientific" is too often used to cover many other things that are slightly tangential with truth, rigor and irrefutable proofs. If we try to put an equal between modern science

and knowledge, this is impossible just because knowledge includes spirituality and art, but “science” let them out.

My own view on applied transdisciplinarity to humanities (Drugus, 2008) is based on the unification of politics, economics and ethics defined in an original and *ad hoc* way, i.e. using only end-means binomial as a common core to all of them. The result is called **End Means Methodology** or the **Politics-Economic-Ethics Continuum**. It generated a new and integrated vision on human beings, without separating and opposing the political, economic and ethical classical considerations. To be clearer: nowadays, it is difficult to admit the convergence of the three disciplines just because economic field is confused with business for profit, political field is confused with political parties activity in election process and even with the state administration, and ethical field is confused with a set of immutable and given for eternity rules of behavior. My proposal to see all of them as a continuum was sometimes viewed old fashioned, as relativity physics already demonstrated that there is no continuum in (sub) quantum world. The same (I mean discontinuity) is in socio-human world, but I think it is quite useful to view the three former disciplines without any border among them. For example, when two firms merge, or two countries unite, the new reality is viewed as a continuum, i.e. without formal borders between them.

I used my own research as an example of transdisciplinary approach and I think that only lived transdisciplinarity is a true disciplinary vision. To apply TD formally may generate nothing or, at most, may generate confusion and futile complexity. In this respect I proposed to consider the old modern name of “science” is dead (i.e. un useful) and to use the very old postmodern term “knowledge” as more adequate and useful. A similar vision, although used in another sense, is that promoted by John Horgan (Horgan, 1996). He speaks about the end of science as it was conceived by official thinking as a way to find truth. Ending science means also that science fulfilled its end and discovered all it was possible to discover. This pessimistic vision was very criticized by those who are living from doing day by day research. Fact is a lot of research is without any practical result and means a big waste. Many times a lot of mimetic research is done for justifying funding or wages. I think a serious discussion is necessary to generate a common language and a convergent vision on what science, research and knowledge is.

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