

Editorial

The current state of scientific publishing: science, magic, or fraud?

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Keywords: academic competition and ethics; publish or perish; open access

First of all, besides being essential to highlight the high honor and pride I felt when being invited to write an editorial for the European Journal of Human Movement, the official journal of the Spanish Association of Sports Sciences, given the quality and recognition that is given to it by the scientific community of a country that treated me so well, it is critical to confess that, when I accepted, I had no idea what would make the most sense to write about.

In this sense, I remembered the famous phrase by Ortega and Gasset ("I am me and my circumstance, and if I don't save it, I don't save myself") and started thinking about the most significant use I could give to this honor, granted to me. An issue immediately occurred to me that, over recent times, has been worrying me (and which is the title of this editorial) ... and about which I understand that it is essential that the scientific and professional community seeks to do something.

Soon after, I remembered Søren Kierkegaard, who said that "life can only be understood by looking back, but it can only

be lived by looking forward," as well as the warning of another philosopher (George Santayana) that "those who cannot remember the past are condemned to repeat it."

Accordingly, I understood that it was essential to look, even briefly, at the past and, immediately afterward, focus on the situation that we have increasingly been experiencing in recent years regarding the dissemination of scientific knowledge, naturally aiming to contribute to its improvement.

Thus, paraphrasing the opening of the first chapter of the Gospel of John (one of the four canonical Gospels in the New Testament), whose opening verses return to the creation of the world, we could say that "In the beginning was the University," an institution created approximately a thousand years ago to develop and disseminate scientific knowledge.

Interestingly, however, it was only much later, at the beginning of the 17th century, that the first publications in scientific journals appeared, namely in the



Philosophical Transactions or in the *Journal des Savants*, which began their activity in 1665, since, until then, the dissemination of scientific knowledge occurred through the use of letters, books, and philosophical and scientific meetings, and was therefore not accessible to many.

Since then, benefiting from the technological development that has allowed easier printing and circulation of these journals, their access has become more democratic, and the debate of ideas has become more widely discussed and publicized. More recently, especially from the end of the last century, with the creation of the Internet and the emergence of the first electronic journals, open access, the use of DOI (Digital object identifier), as well as the creation and growth of preprint publications and fast track, there was a favorable scenario for the exponential increase of scientific journals around the world, promoting their segmentation, as well as the commercialization of these 'knowledge' platforms, which was previously restricted only to universities, but which is now fiercely disputed by other agents, especially from the private sector.

At the same time, in recent years, enormous pressure has also been placed on universities and academics to disseminate the knowledge produced as part of their research activities. In fact, not only has it been observed that the professional development of researchers is increasingly dependent on the number and location of publication of their work, but support for their institutions is essentially indexed to this productivity. It is the famous "publish or perish" in all its plenitude, which

unfortunately causes many unintended and perverse consequences, notably a frequent indifference to ethics and a trampling of principles and values that everyone must respect and protect.

Don't get me wrong: being in Sports, I recognize that competition is the culture we are used to living in, and I like it. But with rules because not all competition is good. Indeed, I do not doubt that excessive competition, without rules and precepts, without people prepared to win and lose, turns against people. It loses its humanist sense and digs its own grave. The current context regarding scientific publications transformed into a 'competitive arena,' in which the weapons consist, for example, the impact factor of journals, the number of papers published by authors per year, or the citations received by their papers, the situation increasingly resembles a war where everything goes to obtain what is understood as success. As John Nichols warned: 'When victory is everything, we do everything for the victory.'

When publishing the most significant number of papers each year is understood as a victory, we obtain results such as the one recently disseminated on several social media networks: by mid-June 2024, there were already more than 20 researchers with more than 200 articles published. Unfortunately, this news is not isolated, as, in Spain, in April 2023, it was noticed that a researcher of green chemistry had published 58 papers in the first half of the year, corresponding to one paper every 37 hours. More worrying is the fact that this trend is exponential, given a work published in *Nature* in September 2018, which, even

excluding certain areas with unique characteristics (e.g., “in high-energy and particle physics, projects are done by large international teams that can have upwards of 1,000 members and all participants are listed as authors as a mark of membership of the team, not for writing or reviewing the paper”), found that while in 2002 only four authors were publishing more than 72 papers per year, in 2008 the number had increased to 39 and in 2016 to 81.

Likewise, news such as that released by The Guardian in February this year regarding the high number of papers that are withdrawn by scientific journals (in 2023, there were more than 10,000 papers retracted, with many analysts believing that this figure is only the tip of an iceberg of scientific fraud) are equally worrying.

In fact, when you look carefully at the money amounts that gravitate towards this field today (see, for example, what it was found by Alexander Thomas, mathematician and co-author of 'Against Parasite Publishers', with a group of mathematicians, physicists, and philosophers from all over the world: scientific publishers “net bigger profit margins than Google, Amazon, and Apple from exploiting the free labor of countless researchers”), you realize that, most likely, ‘we left the wolves guarding the henhouses’, just as we did during the crisis in loans granted by banks in which what was awarded was more the volume of loans granted and not so much the verification of the capacity of those to whom the money was lent to be able to repay it. Here, too, what is largely happening is that what is

most rewarded is the publication, whatever it may be if paid, and not so much its quality. If you pay, you publish... which doesn't matter so much...

And this obviously creates monumental intoxication and distortion of the system, with significant damage. For example, medical research is being compromised, drug development hampered, and bright academic research threatened due to a global wave of deception science that is sweeping laboratories and universities.

It has become common to say that we are in crisis. It's true, as is authentic, that times are not as happy and welcoming as they once were. But it is important to remember that crisis comes from the Greek verb "krinein", which is also the origin of criticism and means to distinguish, discern, resolve a dispute, interpret, explain an issue, judge, appreciate, and decide. As a technical term in medicine, it refers to a disease's high point and a turning point. Crises are, therefore, moments of opportunity to cure evil and improve the general state. They are not death sentences, especially for what is healthy and promising in the body, but rather life sentences.

As the philosopher Ernst Bloch never tired of repeating: "Not lehrt denken": necessity teaches and forces us to think. And that is the main objective of these words: to force us to think about how we can save the system.

If this is not the case, we will run the risk of wasting the enormous potentialities of a system of disseminating knowledge produced by so many researchers and which has brought us so many advantages but

which today exhibits a significant set of vulnerabilities and biases that puts it at risk. cause.

As one of today's most renowned philosophers, Byung-Chul Han, warns, as a result of increasingly intense time pressure, thought tends not to evolve and do nothing more than reproduce itself, which is particularly visible when we look globally at the research carried out aiming to replicate what is already known, devoting less attention and effort to seeking to challenge what is known and create new knowledge. Byung-Chul Han also warns that the proliferation of the identical, with implications in many scenarios and particularly visible in lines of research, in the replication of subjects, and in the profile of university courses, is a farce; passes itself off as growth, but it is more destructive and emasculating than productive.

Another important thinker, Edgar Morin, stated that when a system is unable to solve its vital problems, it either disintegrates or it is capable, within its own disintegration, of metamorphosing itself into a richer metasystem capable of finding solutions to these problems.

In this sense, when I say that the current system is in crisis and is leading us towards the abyss, I do not understand that it must necessarily disintegrate but rather that it must metamorphose. It will therefore be important to seek to retain many of its strong points (e.g., free access, the existence of good referees) but also to neutralize its less strong or negative points (e.g., drift towards business, excessive spraying).

Although this is not the ideal place to develop this topic further (due to space

limitations), I would like to finish by highlighting something that seems to me to be fundamental to reversing the situation we are experiencing: that Universities and other institutions, such as the Spanish Association of Sports Sciences, continue to support the existence of journals like the European Journal of Human Movement, with a renowned editorial team and reviewers, without giving in to the temptations of making money with something that should not be understood as a commercial good but rather as a contribution to progress and well-being of Humanity.

For my part, I will be eternally grateful for that...