

## Of science, copyright and open access

Copyright issues in science have been debated and discussed for centuries. However, with the emergence and growing global support of the open access initiative, a new dimension has been added to this debate.

History reveals that copyright was originally brought into effect purely for the progress of science. The Statute of Anne, 1709, the first copyright law ever to come in place, states its purpose as, 'for the encouragement of learning' and was originally implemented for preventing unethical activities that may damage the creative interests of the author or the due benefits of a printer/publisher of a work. Copyright served its purpose well in the past, because it helped in striking a proper balance between the creator and benefactor. However, in the current context, there are several instances wherein the issue of copyright benefits has been manipulated, thereby defeating its real purpose. One major example is the scientific publishing sector which originated as a service provider for researchers, but has metamorphosed into an approved profit-making venture.

Scientific literature is meant to further the progress of science by acting as a vehicle for the unbiased dissemination of knowledge. Moreover, in the prevailing scientific system, journals are the true lifeline of a scientist. However, unfortunately, scientific publishing is currently the playing field of market monopolizers who are wielding the copyright weapon for their vested interests. At the time of publishing, most publishers demand a transfer of copyright from the author with the justification that they have to meet a plethora of expenses like printing and distribution charges, editorial charges, reprint charges, online edition charges, etc. A certain proportion of these charges is understandably accountable. But isn't the very purpose of science defeated when one has to pay for reading the full text of a scientific content on web? Modern science holds classified information

for a privileged few, who are fortunate enough to be associated with the elite organizations or projects, where institutes or libraries can afford such huge expenditure. When a huge amount of public money is being invested for funding scientific research, there is no justification for keeping the research output under siege and demanding further charges for accessing it. The magnitude of the damage done is similar to the case of corporate drug houses holding the lives of thousands of AIDS patients at ransom, in the name of patent. Most ironically, the publishing agencies resist this free access to their copyright material using advanced software and trained manpower, for which a huge investment is done.

In this context, the recent global celebration of an Open Access Week and the call for an open access initiative from within the scientific community is indeed a breather for science. With several eminent scientists and organizations coming forward for this cause, there is a great hope for the scientific revival through this venture. The fact that even some major publishing agencies are supporting this initiative, by putting forward alternate models for compensating anticipated revenue loss, proves all counter arguments to be baseless. Such models would reinstate the concept of copyright to its status quo ante, wherein it would ensure due benefits to all stakeholders, without impairing the growth of science. Authors, on their part, should have increased awareness on issues of copyright transfer agreements and should utilize the provisions of the agreement for ensuring availability of their research output to all seekers. A blank recommendation for publishing exclusively in open-access journals will not, at present, go down well with the scientific community, owing to the issue of impact factor. However, there is always a counter advantage of increased citation and outreach of the work in the academic arena, which would bring in greater recognition

for the scientists. Research organizations can also play a major role in curbing the publisher's monopoly by creating unrestricted access to all publications emerging from institutionally funded research projects, amongst its academia. This can be best achieved through creation of institutional repositories, wherein the organization will be solely responsible for the distribution and usage of its research publications within the institute.

Such transparent systems would not only strengthen our research scenario, but would also eliminate, or at least drastically reduce, a major plague that has infested today's science, i.e. plagiarism. There are several reports, from the highest rated journals as well, of articles being retracted after two years of publication, citing reasons of plagiarism. Isn't it surprising that the existing peer reviewing system, comprising of eminent scientists from respective fields, overlooked this fact at the time of accepting the article for publication? Well, in the current system, where access to literature is limited and scientists are restricted to a narrow information network, the probability of occurrence of such errors is really high. In an open stream, the peer reviewing would be better strengthened, quality evaluation would be more stringent and most importantly, there will be greater awareness among researchers, which would instill a far greater sense of scientific and ethical responsibility.

Open access is definitely not the be all and end all of it and neither is it being recommended as a panacea for all the illnesses that has infested modern science. But undisputedly, it offers solutions for quite a handful.

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