

Mine, theirs... ours?

Dear fellow biochemists: for several months I have been pondering about bringing to this section a reflection on a topic that might prove thorny: the use of other people's material in our teaching practice. I'm talking of books, images, videos, webpages... any form of presenting the outcome of human mind.

More and more often, due to technological advances, new ways of communication, so-called social networks, off-classroom teaching and study activities, virtual classrooms and campuses... the reality and difficulties of using and sharing materials demand some consideration. One can mention diminishing book sales, that bring into question which will be the future of intellectual production. Likewise, the new formats for editing pose unknowns and challenges. People talk about the rise of open access and open materials, the open licenses, *copyleft*... Finally, you will likely have heard about recent cases of lawsuits against universities due to the use of books in virtual campuses, with infringement of intellectual property rights. All this makes me consider it relevant to address this subject.

Facts and rights

The first idea we must put forward is that any person that produces a work automatically holds the intellectual property rights. There is no need for registration in any official institution. And, what should we understand by a "work" that is subject to author rights? An original, creative activity, in any format. Note that originality does not require the work to be innovative, something which is indeed a condition for it to be patentable.

Intellectual property generates two kinds of rights. First, so called *moral rights*, which include *paternity* –recognition of authorship– and *integrity* –the right not to have the work split or fragmented. These moral rights cannot be given

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up and are kept perpetually. Second, *utilization rights*; these may be signed over (transferred), either exclusively or not, with commercial implications or not, they have an expiry date, and there is much more that needs to be refined in their description. Among the utilization rights we can include duplication, transformation and compensation. The concept of distribution is legally tied to the existence of a physical medium, hence the case of digital works is considered communication, not having a solid medium, and not sale, but a service. There is also a different consideration of public communication –access to the work without distribution of physical specimens– and private use, which is identified as being carried out in a household without the use of networks. As you can see, the question gets complex, and it is neither my competence or my intention to address legal details, so I will not delve much into this. To finish it is just worth mentioning, for its relevance in our field, the right of being compensated for "uncontrollable uses" (i.e. when the holder of rights cannot take part in authorisation or regulation), which results in an economic compensation right.

Copyright: the right to copy

We are overwhelmed by the © symbol, but it is often understood in diverse and possibly unfaithful ways.

© is more than a signature or a declaration of authorship, it is rather a declaration of the "right to copy", that is, a restriction of use for others, who are legally bound to request permission for certain uses of the work, except for the legal *limits*, i.e. those uses –rather scant– that are allowed by law. Restricted uses include duplication (except for private copy and citation, see below), sale or rental, even public playback.

© is not a citation, it does not serve merely to indicate the source where we got an image or a text from. In fact, the © says we cannot reproduce the material as part of our own, unless we have applied for and obtained the permission to do so.

Another remark: in order to declare the © in a work of yours, it must be truly yours in its entirety, not copied, derived or blended.

I will present a real life example: on 2001 we published a molecular biology textbook, which many of you may know. A few years later I found out –just by searching for my name in internet– a postgraduate course given at a Spanish university, among which merits was to present the students with a "course library", made with different chapters, carefully scanned from several books; 4 or 5 of them from our book. When the publishers –owners of the copyright and, hence, of the exploitation rights of our book– contacted with the directors of the course, they claimed their ignorance and even their thought that it was of benefit by spreading the work. An additional issue is that the material was supposedly in a closed environment, only accessible to students registered in the course – a question which does not affect its unlawfulness, by the way–; of course, something had gone wrong since the internet search engine could enter and then lead me, let's say through a backdoor –but that is another topic.

That it is convenient to me, it makes my task easier, I have no other way (at least quick) to solve my need for teaching material... does not make it legal, or otherwise honest to the authors whose work I benefit from. It is true that if we take the legal restrictions to the letter we may find our teaching practice nearly impossible. I do not pretend to be radical, but I do want to uncover the knowledge, the objectivity in regard to legality of some actions. On the other hand, as I intend to expound below, there are feasible solutions one should know about.

Perhaps there is the need to be an author, to have created something, so that your point of view changes.

Here is an anecdote in the form of a question during a course of web page edition: "How can I prevent others from copying my image collection?" My reply: "It is virtually impossible" but served with two questions: are those images truly yours? and, perchance you never take images from the internet? And now you pretend to protect yours! Double standards! Even better: the question is not to protect or not protect, but what model we conceive about production and sharing, and how we respect other people's work.

There are solutions

Well, at this point more than one will be saying: with this scene you are painting, nothing is legal

and how will I perform my teaching duties in a practical way? But please do not stop reading yet, or throw away this article (I wonder, will there be a waste basket for the pages of an html document?).

First, each one will judge what is reasonable and practical to do, under which conditions and environments it is done, but it is unacceptable to become self-convinced of the legality of some practices, or to refuse recognition of reality. Second, I will next comment on a few things that we can do in order to achieve use and production of teaching materials, not only legally, but respecting the effort of creating materials and their authors. Along this line, it is very reassuring to talk to the publishers and the organizations in charge of rights management, whom we might see as "the enemy" on reproduction and commercial issues, but who really are very conscious of the situation and the teaching needs, and agree to more uses than we could think of.

I will split the description in two sections, one for those who need to find and use someone else's materials and the other for those of us who are producing new materials and want to protect –or unprotect– our authorship rights.

As consumers

With "consumer" I intend to refer to all of us who need to use materials –text, images– made by others, essentially as part of our lectures or of the support and reference material we provide our students with. To act correctly, we have two solutions available: to request the relevant permissions from the owner of the rights or to use materials which use has been beforehand authorised by their author.

Requesting permissions

Let's start with permissions. Many of you will think, and rightly so, that asking for permissions for every item we want to use will be a tedious and complex task. That is true, and to top it all there are cases where it is hard to find out who is the owner of the rights, particularly with some materials located in the internet. With books, however, it is usually the publishers who own the copyright and we can address them.

Although publishing companies have obvious commercial interests in producing books, they manifest flexible about offering contents to instructors, attending to their needs. For

example, with licences to prepare electronic libraries (either in the publisher's platform or via the university intranet), or offering instructors the chance to use the complementary material through password-protected environments: image banks, quiz banks, access to additional materials from the publisher to prepare classes, etc. All this with the aim of supporting the instructors in their job and, of course, to favour assignment of the textbook for the course (i.e. the commercial interest).

With regard to images from journal research articles, the procedure would be to contact the publisher. However, this has been made really easy in some cases since they have implemented automated systems to request the licence. For instance, articles in the Nature publishing group have internet access to a form¹ (attached to *Copyright Clearance Centre, RightsLink service*) where we indicate the use we need: educational, to distribute copies, to publish on the web, image resolution, number of figures, etc. and it automatically returns a document with the licence, which may be at no cost. In less than 5 minutes you have solved your need to use a figure from Nature in your course website, without any legal problems and acknowledging the source of the material.

Another possibility to gain permission for reproduction is to deal with the managing organisations. In Spain, for printed materials the relevant organisation is CEDRO.² Their best known role was originally to collect reprographic fees (from photocopies of books, in an extension limited by law) and the distribution of benefits to authors registered with CEDRO, as compensation for private copy (a part of those "uncontrollable uses" we mentioned earlier). Nowadays photocopies are a minor fraction of the use, but the organisation is likewise in charge of managing other aspects like

In Spain, CEDRO acts as intermediary between content producers and rights owners (authors and publishers) on one side, and consumers of those contents, on the other side.

negotiating and granting licences for controlled duplication of protected materials, both printed and digital, in exchange for a fee. We can think, in summary, that CEDRO acts as intermediary between content producers and rights owners – authors and publishers– on one side, and consumers of those contents, on the other side. For example, in those cases when we have trouble finding who is the owner of the rights for some materials, which are the conditions or how to obtain permission, we may address CEDRO to help us locate that information.

In the teaching context it seems more complex and unlikely that an instructor may individually aspire to these permissions, including the economical issue. It will be the universities who must negotiate with CEDRO to gain authorisation for the collective use of several works with educational purposes. And so it is happening, initially with reprographic licences and now particularly since the implementation of virtual campuses (intranets with access restricted to professors and students) where payment of a fee may be agreed as compensation allowing publishing of book fragments; this is typically standardised to 10% maximum from each work's extension. As a reference, agreements reached by several universities are set in about 5 euro per student and year. Here it is our task to make our universities aware of the need to facilitate and regularise institutionally the correct use of teaching materials.

Open licences

As we pointed out at the beginning of the article, any work is protected by default so that the diverse uses require requesting permission ("All rights reserved"). A strong movement has arisen along the last years to facilitate publication of materials which author wants to share and to be reused, under certain conditions declared in advance ("Some rights reserved"). This idea, sometimes identified with the *copyleft* pun, has materialised into what is called open access materials. All of you will recognise a form of this in the appearance of the open access journals, although not every circumstance applies in general to other cases of open materials.

The most prominent example of open licences has been led by Creative Commons.³ This organisation has defined a number of categories about what uses the author is ready to authorise or, in other words, what rights are being given up. In this way, one can understand

clearly what can be done with the material (see table 1), but also a common terminology is used, shared by many pieces of work worldwide, with some legal coverage and translated into several languages.⁴ Very remarkably too, by adding one of these licences into their work, the authors are authorising certain uses that will not need the users contacting for permission. It is, therefore, not just a question of allowing, but also of speeding up the uses.

Our choice as users of materials is, hence, to try and use images, videos, text, etc. that are under this kind of licences, so that we can duplicate them and provide them to our students, make adaptations to our taste or needs... without trouble. We should not forget, while using the materials, the need to mention the licence and the original author, since all CC licences include the attribution or paternity clause.

How to find materials with a licence? Creative Commons provides the *CC Search* service.⁵ The doubt that springs forth is: how are the materials indexed? Actually there is no central registry of materials with CC licence; authors include it in their works but these are not registered anywhere. Apparently, what *CC Search* does is to look in several websites like *Flickr*, *YouTube*, *Fotopedia*... which integrated tools let people who publish some material specify the licence they have chosen. This, obviously, does not warrant finding that item we need if it was published somewhere else in the net or in other support. There also exists a directory⁶ of institutions and persons who use CC licences. Some websites allow within their search engines filtering content by licence. The efficiency of all these tools will depend on the authors learning how we can include licence information while producing and publishing our materials.






One of our major needs is the use of images. here we may opt for searching in Wikimedia Commons.⁷ This is a repository of images, all under Creative Commons or a similar licence, or else in the public domain (meaning absolutely free to use). As a reference, all images in Wikipedia, as well as in other wikis, are stored in Wikimedia Commons. It may not be the final and certain solution for our classes, but it is a good source which, in case we find that image we were seeking, assures us a free use licence under some of the CC variants.

As authors

Let's say you create an original work –like a written text or a drawn diagram– and you publish it on the internet for your students, or otherwise to disseminate your ideas or your work. While doing so, you are likely assuming that anyone

will be able to use, copy... –and how many more things?– your piece of work. The problem is, as the creator, laws automatically assign you the reserve of all rights, what we know as the *copyright*. That is, “all rights reserved”, which is often written like that, explicitly. As a consequence, nobody is legally allowed to do

Table 1. Comparative summary of the permissions tied to *copyright* and to Creative Commons licences.

	 copyright	 CC-by	 CC-by-nd	 CC-by-sa	 CC0 / PD
forces recognition of authorship	yes	yes	yes	yes	no
authorises copy, distribution, etc.	no	yes	yes	yes	yes
authorises public communication	no *	yes	yes	yes	yes
authorises modifications	no	yes	no	yes **	yes
authorises the sale	no	yes, except when "nc" is included			yes

Notes:

*) Legal regulations about definition of public communication and what is authorised are complex.

**) The two “by-sa” licences request that derivative works are shared keeping the same licence as the original work.

CC = Creative Commons

by = attribution, paternity

nd = *no derivatives*, derivative works are not allowed

sa = *share alike*, must be shared under the same licence

nc = *noncommercial*, commercial uses are not allowed

pd = *public domain*

CC0 = *no rights reserved*

with your work anything apart from reading it or watching it –in private. Maybe you don't mind to be cited or not, that it is duplicated or modified... but there is no authorisation for it, unless the user contacts you with a request.

The question is, hence, if you are in favour of sharing or giving away your product, you should declare it clearly and explicitly. So add in your work an indication of the conditions for use. You may put it in your own words but, would it not be better to have a standard message with some legal cover? Here comes handy the invention of "some rights reserved" licences, which most prominent example is Creative Commons³ (table 1). My advice is, so, when you produce some material, you should add a description of the terms of use you are granting and, if possible, choose one of the CC licences in order to make it easier for the users to identify such conditions. The procedure for including the licence declaration is simple and explained in the CC website.^{8,9}

It is equally important to add in your work the information of licence of other people's material that you have included into yours. That means you should also cite your sources and the licences that allowed you to reuse them.

I hope these reflections and the information I have shared might be of help to you in your decisions and in the search for resources for your teaching. An interesting bet underlying all of

this is to grow a culture of sharing our efforts and respecting those of other people.

Disclaimer

This article describes, albeit loosely, the legal criteria prevailing in Spain. Situation in other countries is likely similar but there could be significant legal differences which I cannot address.

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Angel Herráez
Biochemistry and Molecular Biology,
Dept. of Systems Biology,
University of Alcalá
Alcalá de Henares, Spain

References and notes

1. An example of the request form may be seen at <http://bit.ly/1MqrDKQ> and one of the resulting licence at <http://bit.ly/1EDoIbU>
2. Centro Español de Derechos Reprográficos. <http://www.cedro.es/> (consulted on 13 Feb. 2015)
3. About Creative Commons. <http://creativecommons.org/about/> (consulted on 13 Feb. 2015)
4. Explanation of the Creative Commons licences. <http://creativecommons.org/licenses/> (consulted on 13 Feb. 2015)
5. Creative Commons Search. <http://search.creativecommons.org/> (consulted on 13 Feb. 2015)
6. Creative Commons Directory. https://wiki.creativecommons.org/Content_Directories (consulted on 13 Feb. 2015)
7. Wikimedia Commons: a database of 24,730,660 freely usable media files to which anyone can contribute. <http://commons.wikimedia.org/> (consulted on 13 Feb. 2015)
8. Creative Commons Licence Selector. <http://creativecommons.org/choose/> (consulted on 13 Feb. 2015)
9. Creative Commons Wiki: Marking your work with a CC license. <https://wiki.creativecommons.org/Marking/Creators> (consulted on 13 Feb. 2015)