Creative Commons Licensing Workshop for CCD

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0 The Plan

The goal of this workshop is to give a quick (well, three hour...) overview of the material in the Creative Commons Certificate, which is an intensive, online, 10-week course offered by the Creative Commons Organization.

The CC cert comes in two variants, both organized into five units:

1. **What is Creative Commons?**
2. **Copyright Law**
3. **Anatomy of a CC License**
4. **Using CC Licenses and CC-Licensed Works**
5. **Creative Commons for Educators**

   or

   Creative Commons for Librarians

We'll discuss each of these topics, in order, with quick assignments for each unit, and short breaks.

Unit 1. What is Creative Commons?

> *"Creative Commons is a set of legal tools, a nonprofit organization, as well as a global network and a movement all inspired by peoples willingness to share their creativity and knowledge, and enabled by a set of open copyright licenses.*
>
> *Creative Commons began in response to an outdated global copyright legal system. CC licenses are built on copyright and are designed to give more options to creators who want to share. Over time, the role and value of Creative Commons has expanded."*[1]

[Perhaps this is mostly just interesting context. It does make a nice warm-up before the technicalities of copyright law and license details, though.]

We'll divide this unit into two pieces.

[1] The large block quotes in italics used in these slides are taken from the 2020 Course Content of the Creative Commons Certificate, which is by the Creative Commons and released under a CC BY 4.0 International license.

1.1 The History of Creative Commons

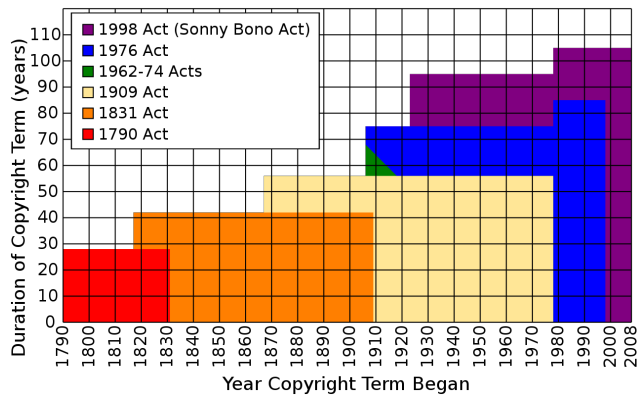
The official position on this history is, as we saw, that "*Creative Commons began in response to an outdated global copyright legal system.*"

This is not a surprising position since two of CC's founders were

- Larry Lessig, then of Stanford Law, now at Harvard Law, and
- Eric Eldred, a literacy advocate a web publisher of works in the public domain.

Lessig represented Eldred in *Eldred v. Ashcroft*, challenging the "Sonny Bono Copyright Term Extension Act" [CTEA] of 1998, all the way to the US Supreme Court. [Where they lost, in 2003.]

The CTEA extended the term of copyrights, *even for already existing works!*, by 20 years, making copyright last for **the life of the creator plus 70 years**.



[2]

[2] "**Trend of Maximum U.S. General Copyright Term**," by Tom W. Bell was released under a Creative Commons Attribution-Share Alike 3.0 Unported License..

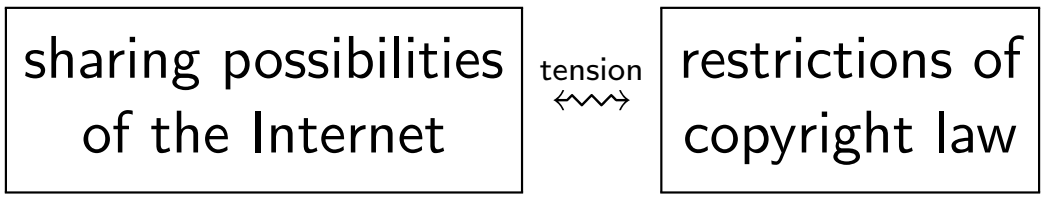
1 So They Founded Creative Commons...

In frustration, and perhaps sensing which way the wind was blowing, Lessig, Eldred, and a computer science professor Hal Abelson of MIT, founded the nonprofit Creative Commons in 2001.

In addition to fighting a loosing battle against the CTEA, the CC founders felt that copyrights of even much shorter duration we in conflict with modern technology:

> *"The internet has given us the opportunity to access, share, and collaborate on human creations (all governed by copyright) at an unprecedented scale. The sharing capabilities made possible by digital technology are in tension with the sharing restrictions embedded within copyright laws around the world."*

I.e.,



1 ...As an Alternative to All-Rights-Reserved Copyright

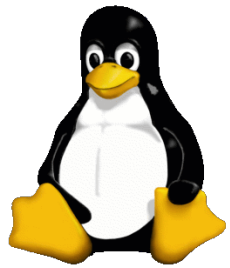
The CC approach to relieving this tension was to create a suite of licenses **whose powers stem from the powers given to creators by copyrights** which allow creators to share their works in a more precise way than merely the "all-rights-reserved" of traditional, basic copyrights.

Much more about the CC "suite of licenses" and the "powers given to creators by copyrights, below [in Units 3 and 2, respectively].

But first, an alternative to the above [CC-sanctioned] history:

Creative Commons was not the first commons-based, open movement.

It wasn't the first one in modern times: that honor probably goes to the *free/libre/open-source software* [FLOSS] movement.



[3]

I assert that there is a much older tension in the Western [I don't know others well enough to say] tradition which bears on the history of CC.

[3] "**Linux 2.0 Penguins**," by Larry Ewing <lewing@isc.tamu.edu> and The GIMP.

1 The prehistory of FLOSS

The School of Athens by Raffaello Sanzio



Image in the public domain: Raffaello died in 1520. Original in the *Stanza della Segnatura* in the Vatican. This version: https://commons.wikimedia.org/wiki/File:%22The_School_of_Athens%22_by_Raffaello_Sanzio_da_Urbino.jpg.

1 Pythagoras: Keeping knowledge secret on pain of death



He didn't prove or originate "his" theorem.
The *Pythagoreans* were not unlike a *cult*, with odd dietary restrictions, belief in their leader's magical powers (talking to animals, *etc.*), divided as:

- *mathematikoi* ["learners"] who lived apart and knew hidden mysteries (*e.g.*, that $\sqrt{2}$ is irrational[4]); and
- *akousmatikoi* ["listeners"] who lived with their families and only aspired to greater secrets.

Hippasus of Metapontum, a renegade mathematikos, was tracked down and executed for the crime of revealing to the public that $\sqrt{2}$ is irrational.

[Pythagoras himself was killed when unwilling to step into a bean field despite being pursued by an angry mob.]

[4] meaning that there do not exist whole numbers p and q such that $\sqrt{2} = p/q$

1 Euclid's radical openness



He was a librarian. [in Ptolemaic Alexandria]
His *Elements of Geometry* had more editions and influence than any other book [in the West; other than the Christian Bible].
The Elements was loved by Galileo, Newton, Hobbes, Spinoza, Descartes, Abraham Lincoln, Albert Einstein ... and many, many others[5]
For hundreds of years [in the west] it was considered a right of passage in the education of [yes, male and elite] young people to master *The Elements*.

The Elements was so influential because it was completely open, laying out all of its Theorems **with proofs** [including one that $\sqrt{2} \notin \mathbb{Q}$].

Proofs are like like the source code if a theorem were a program: Yes, Euclid was doing FLOSS [free/libre/open-source software] more than 2K years before the invention of the computer!

[5] *E.g., Moby Dick* says that the difficulty of whales mentally putting together the two images perceived by their widely separated eyes must be as if a human were "simultaneously to go through the demonstrations of two distinct problems in Euclid."

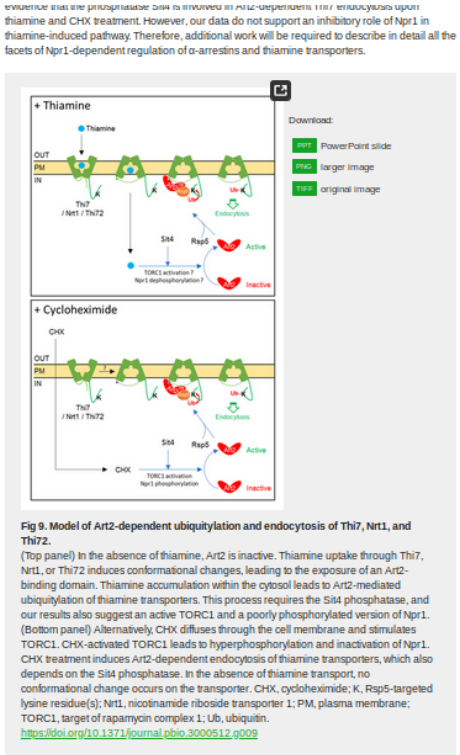
1 When FLOSS became FLOSS

Euclid's radical openness is the foundation of modern mathematics, science, and the whole Academy. *E.g.*, a modern scientific paper has a standard format, including sections for **Methods** and **Results**... that's pretty open.

This is what Richard Stallman describes when he talks about founding the GNU Project and the Free Software Movement in the 1980s: while at MIT, he wanted to improve a printer driver and he expected the manufacturer would share it's source code with him, the way scientists share methods which each other. His frustration when they wouldn't lead him to start down the GNU path.



This image GNU head, by Aurelio Heckert is released under a Creative Commons Attribution-ShareAlike 2.0 License.



thiamine and CHX treatment. However, our data do not support an inhibitory role of Npr1 in thiamine-induced pathway. Therefore, additional work will be required to describe in detail all the facets of Npr1-dependent regulation of α-arrestins and thiamine transporters.

Fig 9. Model of Art2-dependent ubiquitylation and endocytosis of Thi7, Nrt1, and Thi72.
(Top panel) In the absence of thiamine, Art2 is inactive. Thiamine uptake through Thi7, Nrt1, or Thi72 induces conformational changes, leading to the exposure of an Art2-binding domain. Thiamine accumulation within the cytosol leads to Art2-mediated ubiquitylation of thiamine transporters. This process requires the Sit4 phosphatase, and our results also suggest an active TORC1 and a poorly phosphorylated version of Npr1. (Bottom panel) Alternatively, CHX diffuses through the cell membrane and stimulates TORC1. CHX-activated TORC1 leads to hyperphosphorylation and inactivation of Npr1. CHX treatment induces Art2-dependent endocytosis of thiamine transporters, which also depends on the Sit4 phosphatase. In the absence of thiamine transport, no conformational change occurs on the transporter. CHX, cycloheximide; K, Rsp5-targeted lysine residue(s); Nrt1, nicotinamide riboside transporter 1; PM, plasma membrane; TORC1, target of rapamycin complex 1; Ub, ubiquitin.
https://doi.org/10.1371/journal.pbio.3000512.g009

Materials and methods

Yeast strains and growth conditions

Yeast strains used in this study (S3 Table) are derivatives of *Saccharomyces cerevisiae* auxotrophic strain BY4742. The *npi1–1* (*rsp5*) mutant strain, obtained by insertion of a selective marker in the *RSP5* promoter and resulting in an attenuated *RSP5* gene expression by a factor of 10, was provided by Pr. Bruno André (ULB, Belgium). The *art2Δart9Δ* strain was obtained by yeast crossing and tetrad dissection. The *end3Δart2Δ* strain was generated by homologous recombination using a *natNT2* deletion cassette on an *end3Δ* background. The strains lacking genes encoding the thiamine transporters Thi7, Nrt1, and Thi72 and the gene encoding the thiazole synthase Thi4 were received from Pr. Jürgen Stolz (TUM, Germany). For proteomic analysis, yeast strains were grown in YD medium (2% glucose and 2% KAT yeast extract). For Thi7 endocytosis experiments, transformed yeast strains were grown in selective thiamine-free

This paper Yeast -arrestin Art2 is the key regulator of ubiquitylation-dependent endocytosis of plasma membrane vitamin B1 transporters by Savocco *et al.* is released under a Creative Commons Attribution

1 A structural and #metoo *caveat*

Yes, access to knowledge has been (and continues to be) restricted by wealth and privilege and geography and power and *etc.*

But for hundreds of years **the fundamental logic of the scholarly life has been to share**.

A critical approach to the structures of education is required if we are to serve what I have been asserting is a large part of the fundamental ethic of the scholarly life. Read Paolo Freire, bell hooks, Pierre Bourdieu, and many others – please get back to me when you've figured out it all out.

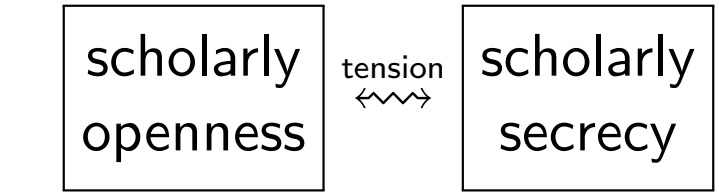


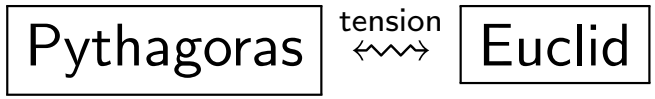
And of course there is `#metoo`. Richard Stallman's treatment of women throughout his career has been a vile contribution to the toxic culture towards women in IT.

"Maha Bali" from Uncommon Women 2018 coloring book by Kelsey Merkleya is released under a Creative Commons Attribution License.

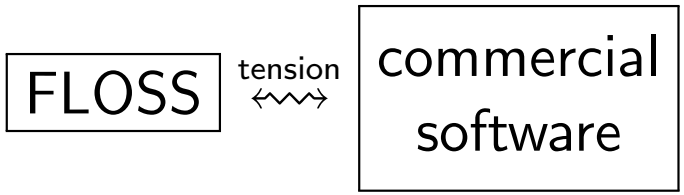
1 Alternate History of CC: Summary

So alternate tensions motivating CC might be, in ancient times:





and in modern times:



In particular, the **GNU Public License** is a direct antecedent of [some of the] Creative Commons licenses.

Whichever history you like, let's talk now about the present.

1.2 Creative Commons Today

Today, **Creative Commons** means (for us, at least) three things:

- a suite of licenses which give creators fine-grained control over the uses which may be made of their works
- a global movement of "*activists working on copyright reform around the globe, policymakers advancing policies mandating open access to research and data, and creators who share a core set of values. Most of the people and institutions who are part of the CC movement are not formally connected to Creative Commons.*"
- a small, distributed non-profit which works to protect and promote the licenses and to support the movement around the world.

Unit 1 Break and Assignment

Take a five-minute break.

If you like, during the break, research and think about one of the following things, to share back with the group [if you like] when we return:

- How many objects are under Creative Commons licenses at the moment? *[Hint: there exists something called the "State of the Commons report...."]*
- Under what platform did Larry Lessig recently run for president?
- What did Richard Stallman have to say about "free beer?"
- Do you use any FLOSS? If so, are you some kind of weirdo?
- What is Maha Bali's twitter handle, where does she blog and about what topics?

Unit 2. Copyright Law

The CC licenses derive their power from the powers of copyrights, so we have to do a bit of a dive into copyright law. Some notes about our dive:

- This is not legal training, I am not giving you legal advice here, nor will you be qualified to give legal advice after today's workshop (unless you have other legal training, qualifications, license, and *etc.*), nor would you be qualified even if you did the full, 10-week CC Certificate course. When answering your colleagues' questions about this stuff, you should say things like "I am not a lawyer ... but in <this similar situation> I would be comfortable doing <something> because <reasons>."
- Intellectual Property [IP] lawyers are expensive, but screwing up can be costly – *e.g.*, what happened in Houston.
- Copyright law is to the scholarly life what medical malpractice law is to the medical life... so learning a bit about copyrights is really useful for us even if we don't care about open licensing!

Activity 2.1: Where is copyright?

For the next two minutes:

If possible, *make a brand-new, copyrightable work* – an original work which could be copyrighted (in the United States) if you so chose. You may use anything to which you have access, wherever you are: paper and pen/pencil; laptop; phone with its audio and/or video recording capacities; pipe-cleaners and modeling clay you may have around the house....

If it is not possible to create a copyrightable work under these circumstances, write a few sentences, record a video, or otherwise fix in some tangible medium your own original words describing why you cannot do so.

Discussion 2.1: Copyright is everywhere (in academia)

"...original works of authorship fixed in any tangible medium..."[6]

"original" $\rightsquigarrow$ But very minimal originality suffices. *E.g.*, your vacation snaps are probably boring [I'm sorry to say] but copyrightable[7].

"works of authorship" $\rightsquigarrow$ Also known as *"expressions"*, but definitely **not** ideas [which however may be patentable].
Some devilish details: fictional characters **are** copyrightable; recipes and theorems **are not**; some plotlines **are**, others are *scènes à faire* and so **are not** copyrightable....

"fixed ..." $\rightsquigarrow$ *E.g.*, this is why there's always a recorder going in the back of a jazz club – now do you want to record your presentations?

[6] from §102 of the *Copyright Act* 17 U.S.C.

[7] ...probably ... but remember **IAmNotALawyer** and nothing in this presentation constitutes legal advice!

Activity 2.2: How to get that "©"

For the next minute:

If possible, *get*, or at least, *start the process of getting a legal copyright on the work you just made*. This may involve:

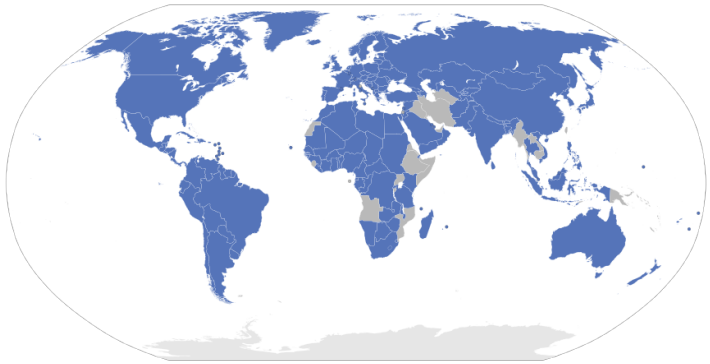
- adding some text to your work [then: do that], or
- going to a government website [use your phone or laptop: get the URL to share with the class], or
- filling something out and mailing it [along with something else, perhaps? make a packing list!] somewhere [get the form, or a link to it, and the address, to share with the class], or
- something else?

$\rightsquigarrow$ If you must pay a fee as part of this process, wait at the place where you have to enter in your credit card number, and we'll all share that in the discussion to follow.

Discussion 2.2: The "©" is automatic!

Under the Berne Convention – originally signed in 1886; today it has 177 signatories and is overseen by the World Intellectual Property Organization [WIPO][8] – *copyright is "frictionless"*, in that it springs into existence the minute the work is fixed.

Of course, this only matters if your work is created or consumed in one of the countries colored blue here:



[9]

Conclusion: Nearly everything faculty, staff, and students create in institutions of higher education is born in chains (of copyright).
For this reason, for academics not to know something about copyright would be like a doctor who knows nothing of liability law....

[8] Cory Doctorow says that WIPO "bears the same relationship to bad copyright law that Mordor has to evil in Middle Earth"

[9] "**The signatories of the Berne Convention for the Protection of Literary and Artistic Works**," by User:Conscious was released under a CC BY-SA 3.0 license.

Activity 2.3: What is copyright good for?

In the next minute, write down four things:

1. something you can do with a work whose copyright you own
2. something you can do with a work whose copyright you **do not own**
3. something you cannot do with a work whose copyright you own
4. something you cannot do with a work whose copyright you **do not own**

Bonus round: What do time and space have to do with it?

$\rightsquigarrow$ Do any of your answers above change if you and the other party involved – the copyright owner or person performing the dis/allowed action – are separated in time and/or space? If so, by how much or by what kind of border or line?

Discussion 2.3: The uses of copyright

A copyright owner has the exclusive right to

- **perform**,
- **display publicly**,
- **copy**,
- **distribute**, and
- **create derivative works** from the copyrighted work,

or to authorize other parties to do so, for payment.

Some devilish details:

- ⇝ Is *streaming* the same thing as *copying*, legally? Because **it is, technically.**
- ⇝ Is putting a link to a work the same as copying or distributing it?
- ⇝ What constitutes a derivative work is tricky! *Correct typos:* **no**; *translate:* **yes**; *change file format:* **no**; *write a sequel:* **yes**; *put in anthology:* **no**; *etc.*
- ⇝ In the OER/CC world, the concepts of a *remix* and a *derivative work* have an ... unfortunate relationship.

Activity 2.4: Is copyright all-powerful?

Do you know of any limitations to copyright? Based on situation, time, location, use...?

Two activities to explore that:

Think of (and write down) something a user could do with a copyrighted work that the copyright owner might not like, but could prevent. (Your examples may differ depending upon the kind of work being used and the legal jurisdiction....)

Why did earlier slides talk about "copyright owners?" Is there any difference between *copyright owner* and *author/artist/creator*?

Discussion 2.4.1: Limitations to copyright.

Works-for-hire: the copyrights to works produced as part of someone's employment belong to the employer, not the employee.

- ⇝ *Academic exception-to-the-exception:* Traditionally, academics are exempt from the *works-for-hire* doctrine – but check your contracts!

US Federal exemption: works which would fall under the *works-for-hire* doctrine with the US federal government as employer are automatically free of copyright – they are born directly into the **public domain**.

Limited duration: the exclusive control vested in a copyright owner only lasts for a finite period of time: in the US, 70 years after the death of the author, the works "fall into the public domain."[10]

[10] The rules are more complicated for works-for-hire, and any work created before 1978.

Discussion 2.4.2: A useful limitation to copyright.

".. the Fair use[11] *of a copyrighted work, including such use by reproduction*

..., for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include –

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work."

§107 of the Copyright Act

[11] a closely related concept in Commonwealth countries is called **fair dealing** there.

Activity 2.5: Why all this copyright power?

Why would anyone set up a legal system which puts this kind of exclusive control in the hands of copyright owners?

Take three minutes to come up with some reasons why such a system might make sense.

You might classify your reasons as to whether they are **utilitarian** [centered on the consequences – often economic – of actions] or **deontological** [based on rules, often coming from an abstract notion of the moral sanctity of the act of artistic creation].

Discussion 2.5.1: The Founders had an answer

Copyright in the United States stems from Article I, Section 8 of the US Constitution, known as the *Copyright Clause*[12], which gives Congress the power to enact laws

> *"To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."*

Here, the Founders were following *classical liberalism*[13] by assuming that creators could be seduced to greater creative production of Science and useful Arts by the lure of monopoly profits, for limited Times, coming from their ownership of the intellectual property in their respective Writings and Discoveries.

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[12] although it is also the source of the power to create patents and trademarks: all IP law, in fact!

[13] Not to be confused the the more modern **neoliberalism**, which much more relentlessly thinks of *everything* in human life in purely market terms and which is the "free-market fundamentalism" behind many of today's problems in higher ed and beyond.

Discussion 2.5.2: But the Founders were not academics

The [neo]liberal view of how to motivate creative activity is, I assert, manifestly in tension with the longstanding[14] values of the academic world, in which world David Wiley's 5Rs of Open, that anyone should be able to **Retain**, **Reuse**, **Revise**, **Remix**, and **Redistribute** freely and without seeking the creator's permission, seem fundamental and self-evident.

So how can we deal with the automatic creation of restrictive and entirely anti-academic copyrights?

This is exactly what Lessig and colleagues sought to do in founding the Creative Commons organization and building the CC licenses.

The key legal idea here is to use the powers of copyright to subvert their implications from within.

But that's all the subject of the next Unit.

[14] We've already seen what Pythagoras and Euclid have to do with this!

Unit 2 Break and Assignment

Take a short break. During the break, here are some fun things to ponder:

- The *Copyright Clause* gives a very **utilitarian** justification for IP law. Other countries emphasize instead the **moral rights** creators have over their creations. Explain what you think this could be based on; research on this topic would also be good, if you like *[Hint: where do students go for quick research?]*. Which approach do you find more convincing, and why?
- Even the pure utilitarian explanation of copyright [in fact, all of IP law] is based on a couple of empirical hypotheses about the world: that creators will make more money by always exercising exclusive rights over their works; and that society will get more creative works by incentivizing their creators with the prospect of financial gain. Do you think these hypotheses are always/often/sometimes true? Do you know any related examples? Can you imagine other systems which might achieve these same gains differently?
- Would you like to tinker with copyright law? If so, how?

Unit 3. Anatomy of a CC License

Let's continue the same active discussion as we move into how the Creative Commons license suite responds to some of the above issues.

We'll start by motivating the four *license elements*, and then describe the resulting six complete license.

To those six licenses, we must then add a bit of discussion of CC's Public Domain Mark and Tool.

We must also talk a bit about how CC licenses operate with respect to limitations and exceptions to copyright: see the "key legal idea" from Discussion 2.5.2, two slides back.

Finally, we'll mention some of the architecture of all the licenses in the suite.

Activity 3.1: The *sine qua non* of a scholarly IP system

Someone shout out the most fundamental required part of an intellectual property system designed for use, re-use, remix, etc.

There are actually two sides to this:

producers of scholarly work: What do scholars most want to happen with their work?

users of scholarly work: What do we insist of downstream users of scholarly work? [This should be easy: we tell it to our students all the time, use software systems to detect its violation, and discipline students when such violations are detected.]

Take a minute to think through and write down some details of this: Who would have to do what, when, including which components, and in what format, to make this work?

Discussion 3.1: BY is fundamental

All Creative Commons licenses begin "**Creative Commons Attribution**" and have the icons and . The most basic license looks *in situ* like:


This work is released under a Creative Commons Attribution 4.0 International License.

[Note **that is not** the license on these slides: it is merely shown here as an example.]

It is good form to put this license statement – *with link to specific CC license web page* – on the title page or at least near the front of the work.

You may freely retain, reuse, redistribute, perform publicly, and create derivative works of CC-BY works, but you must always give **attribution**. Think of this as finally putting some legal teeth in the constant academic refrain that appropriate credit must always be given to prior work: with the BY license element, not only is plagiarism an academic impropriety, it is actually *illegal!*

Activity 3.2: Utilitarian and moral rights CC adjectives

Take a couple of minutes to think and/or collaborate on what optional adjectives you might add to CC licenses [like "BY"] **so users could choose to retain some of the power of copyright.**

As you do this, think about the *why all that copyright power* we discussed in Activity 2.5, and try to take a maximalist stance for both the *utilitarian* [probably via economics] and the *moral rights* perspectives.

When you think of the copyright power you might want to offer optionally to preserve in CC licensing, make up a two-letter CC adjective which can be added to license (after the basic "CC-BY"). Write down as much detail about how that power would play out for both the creator and a user of the licensed work.

Discussion 3.2: NC and ND

The maximalist economic stance on the benefit of copyright is: the creator wants any profits to be "mine, all mine." Under CC-BY, the work will be freely shared, so the best this maximalist can do is to insist that at least *no one else will make any money off of my work!*
This is the **NonCommercial** license adjective, with icons  ,  , or  , depending upon jurisdiction.

The maximalist moral rights stance is: the creator doesn't want anyone to mess with their work. Under CC-BY, the work will be freely shared, so the best this maximalist can do is to insist that at least *my work will never be changed – no derivative works will be made from my original!*
This is the **NoDerivatives** license adjective, with icon  .
[Note that since version 4.0, the ND adjective only requires that users *may not distribute* any derivative works they make, since it is hard to control what they may do in private.]

Activity 3.3: Maximalist on the power itself

Take a couple of minutes to think and/or collaborate on the following:

Suppose the power of copyright goes to your head, and you want to use it in a maximalist way ... but to do the good of one of the other CC license adjectives. Think of an adjective which could work in conjunction with those others to make the good last longer.

You may chose to use *viral* open-source software licenses, like the *GNU Public License [GPL]* used in the GNU-Linux operating system, as inspiration here.

Once again, make a two-letter CC adjective code for this idea and describe how it works for creator and user in as much detail as possible.

Discussion 3.3: Go viral with SA

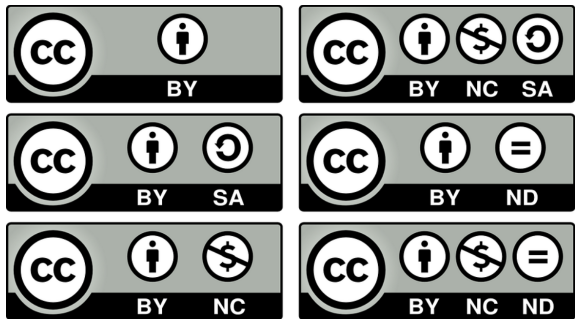
The maximally controlling creator who is (perhaps somewhat hypocritically) interested in freedom continuing into the future, might insist that any derivative works which come from their work should be shared with the same license as theirs was.

This is the **ShareAlike** license adjective, with icon  .

Note that since SA is a requirement on how future creators will license derivative works, it doesn't make sense to combine SA with ND, since ND does not allow derivative works to be distributed at all.

3 Summary of all combined CC licenses

Here are the resulting possible Creative Commons licenses:



Let's take turns each describing one of these licenses, saying for each one

- what uses it allows to the public,
- what restrictions it imposes along with those uses, and
- in which situations you might want to use that license.

3 Why not go all the way to **Public Domain**?

If we're so interested in giving others freedoms for our work, why not go all the way to simply putting them in the public domain?

In the United States, a creator can simply choose to dedicate their work "to the public domain," after which they have no rights over that work whatsoever (not even the right to be attributed when it is used). But this is not possible in all countries in the world!

Therefore, the Creative Commons have crafted something called "CC0, the public domain dedication tool." CC0 puts a work immediately into the public domain, in countries where that is possible. In countries where that is not possible, it includes a "fall-back license" which amounts to giving the rights of the public domain. It even has a final fall-back, in case the first two steps don't work, where the creator promises never to enforce any remaining rights whatsoever over the work.

The corresponding icon is 

.

3 One last icon

Sometimes [rarely] one sees the icon 

, called the *Public Domain Mark*.

This is neither a license nor a tool, it is merely an indication that the person distributing that work believes it to be in the world-wide public domain.

You should be very careful about using this mark, and only apply it if you are absolutely confident that what it asserts about the attached work is true.

I could have put the Public Domain Mark on that image of *The School of Athens* by Raffaello Sanzio, because I am very confident that a work created by someone who died in 1520 is in the public domain.

3 CC Licenses *vs* Limitations and Exceptions to Copyright

The power that a creator has to control what users do with their work comes from copyright.

Hence, if copyright doesn't apply, then the CC licenses can have no force.

- For example, a work which doesn't qualify for copyright protection cannot have a CC license.
- Likewise, only the copyright owner can put a CC license on a work.
- Also, a use of a work under one of the exceptions to copyright restrictions does not have to follow any of the CC license provisions on that work.

Think of and share some examples of all of the above situations!

3 The Structure of All CC Licenses

All six of the CC licenses have the same over-all structure: a three-layer design, depicted in this diagram $\longrightarrow$



Here the layers are

1. The **legal code** contains the "lawyer-readable" terms and conditions that are legally enforceable in court.
2. The **commons deed** consists of the web pages that lay out the key license terms in "human-readable" terms. The deeds are not legally enforceable but instead summarize the legal code.
3. The last layer is the **machine-readable** version of the license, written in something called the CC Rights Expression Language [CC REL], which is used by search engines and other automatic tools.

I used to be very scared of the legal code, but it's not actually that bad – now I like to look at it!

Unit 3 Break ... and Assignment?

Take a short break. We're probably all to tired for assignments at this point, but how about

- Find some example pages on the web with various CC license icons.
- What CC license would you consider using for which of your own works? Why?
- Are there other specialized restrictions you would like to be able to use? What would those restrictions be? What would be a use case for your new license clause?

Unit 4. Using CC Licenses and CC-Licensed Works

In this Unit, we'll start by talking about how to choose a license, including using the License Chooser, and putting enough information on your work so that others can give you appropriate attribution.

This begs the very important question of how to give that attribution, for which we have the convenient acronym **TASL**.

It's important to note here that CC licenses are *irrevocable*, although the creator can make uses of their CC-licensed work which seem to violate the terms!

Finally, an issue which comes up very often in using CC-licensed works is what are the constraints on remixing those works, perhaps in combination, and what constitutes a remix as opposed to a "collection." In this part, we need to consider which licenses can be put on a remix, when different works can even be remixed together, and what licenses can we put on a collection. There will be some helpful charts for this technical material.

4 Choosing and applying a CC license: the "Chooser"

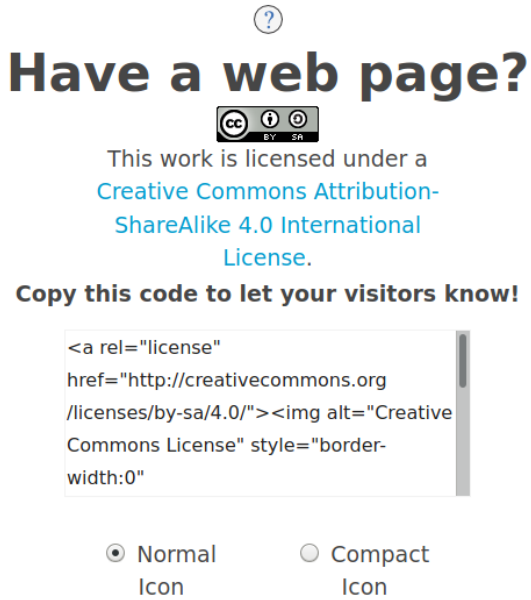
We've discussed the various license features, so hopefully you are somewhat comfortable with deciding which license to use. There is perhaps still the matter of **how** you apply that chosen license.

Fortunately, the web page

creativecommons.org/choose

asks you some simple questions to make sure you are making the right license choice for your purposes, and then gives you a beautiful statement to attach to your creation showing which license you have selected.

For example, if you were to go to that page and make the choices I made for these slides, the choose page would have a bit that looks like this $\longrightarrow$



4 Choosing and applying a CC license: Always do **this**

In the example image on the previous slide, the part between "**Have a web page?**" and "**Copy this code to let your visitors know!**" is crucial:



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

There are several components to notice here:

- *An icon indicating the license.* While not a legal requirement, this is really important to help users instantly know what license terms apply to the work.
- *Some standard language, including the name of the license.* Again, not a legal requirement, but clear language, preferably standard, is also very helpful.
- *The link to the creativecommons.org license text.* This is legally required; spell out the URL if true links are not possible in whatever format you're using.

4 Choosing and applying a CC license: Also include **this**

You also want to include enough information in your works so that users can give you proper attribution, required by all CC licenses!
Good attribution must follow the simple rule: **TASL**.

Title: What is the name of the work?
Author: Who owns the work?
Source: Where can it be found? (Provide link if possible.)
License: Which license is the work distributed under? (Provide link to creativecommons.org license source.)

Therefore, what was missing from our licensing components, and implicitly from what the license chooser web page builds for you, is that your work should have a title and author shown somewhere.

[Well, anonymous works are possible, and you could use the URL or some other description in place of a title, but that is usually not what the author really wanted.]

4 Changing your mind about a license, other permutations

It is important to remember that CC licenses are **irrevocable**. That is, once you have put a work out into the world with a CC license on it, anyone who finds a copy with that licensing statement can use it in the ways permitted by the specific license, even if you have since changed your mind.

In particular, no later statement on your part can change what legally can be done with the first release.

That nevertheless does not prevent you from issuing another copy with a different license statement, or even from using the work in ways that seem impossible according to the license – like selling an NC-licensed work. After all, you're the copyright owner, you can do what you want with the work and no one else would have legal standing to sue you.

4 Remixes and collections

Some of the CC licenses allow downstream users to make adaptations/ remixes. Some do not.

Some allow remixing but restrict the licenses which the remixer can use on their new work.

This is a practical issue that comes up all the time in the OER world, but which a clear understanding of the license terms themselves should make fairly straightforward.

It's also important to distinguish between a few separate, unchanged works put near each other, like a collection of poems, called a **collection** in this context, and a true remix, perhaps of several works with different licenses.

We won't discuss collections today, other than to say that licensing them is actually quite easy, because you're really just copying the original parts, which is allowed by all CC licenses. You do have a very thin copyright just in the choices you've made in your arrangement, as well as any new text you create.

Activity 4.1: Remixing CC Licensed Works

Say you want to make a remix[15] of an existing work which has a CC license or is in the public domain [maybe you're adapting an OER!].
Fill out the following chart with a ✓/*X* if you may/mayn't use the specified *adapter's license* on your remix, given the original work's license.

Adapter's license chart		Adapter's license						
		BY	BY-NC	BY-NC-ND	BY-NC-SA	BY-ND	BY-SA	PD
Status of original work	PD							
	BY							
	BY-NC							
	BY-NC-ND							
	BY-NC-SA							
	BY-ND							
	BY-SA							

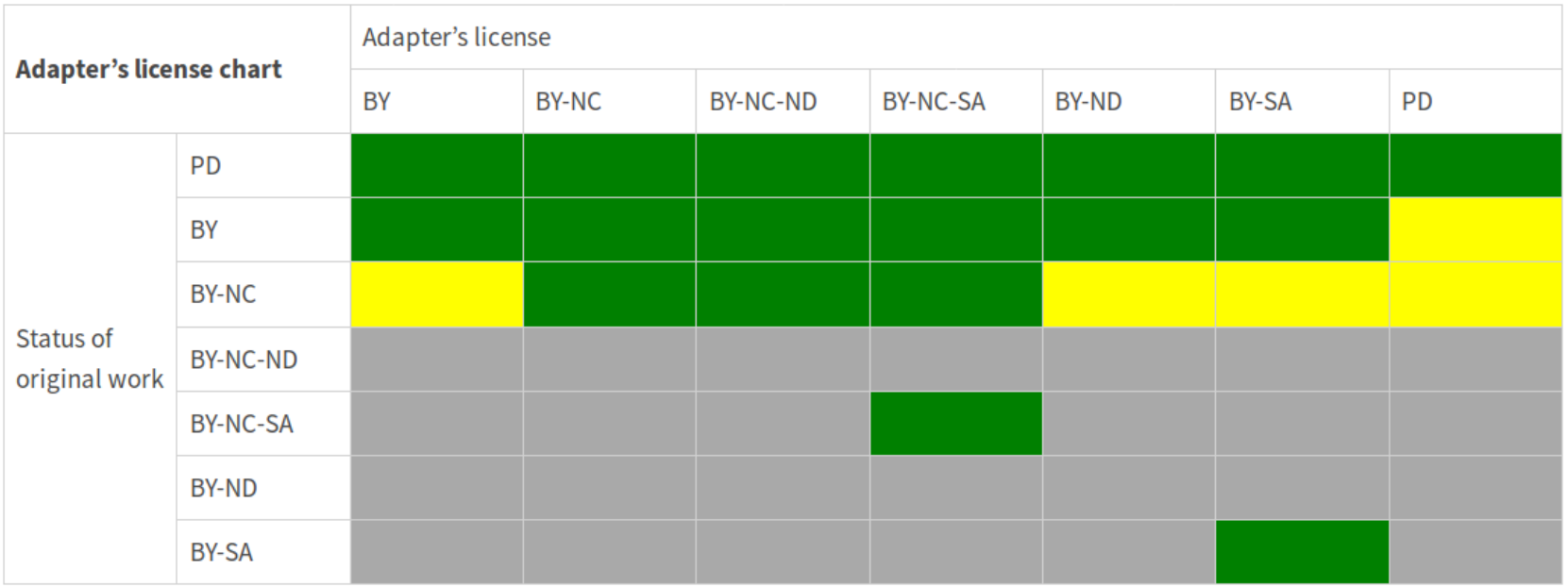
16

[15] in the CC world, the nouns *remix*, *adaptation*, and *derivative work* all refer to the same thing

[16] adapted from "Adapter's license chart" by Creative Commons, which was released under a CC-BY 4.0 license.

Discussion 4.1: Check Your Work

CC did this work for us, see their FAQ.



[17]

Here

- ■ means that is a permitted adapter's license [*i.e.*, it's our "✓"]
- ■ means it is technically permitted, but highly discouraged
- ■ means that is a forbidden adapter's license [*i.e.*, it's our "*X*"]

[17] "Adapter's license chart" by Creative Commons was released under a CC-BY 4.0 license.

Activity 4.2: Extra Credit

Say you want to make a remix combining two different original works. **Fill out the following chart** with a ✓/✗ if you may/mayn't make a remix, with some license, given the original works' licenses.

Combiner's license chart		License on original work A						
		BY	BY-NC	BY-NC-ND	BY-NC-SA	BY-ND	BY-SA	PD
License on original work B	PD							
	BY							
	BY-NC							
	BY-NC-ND							
	BY-NC-SA							
	BY-ND							
	BY-SA							

[18]

[18] adapted from "Adapter's license chart" by Creative Commons, which was released under a CC-BY 4.0 license.

Discussion 4.2: Check Your Own Damn Extra Credit

Come on, show some independence.

No, really, the idea is to use the *Adapter's license chart* to see if there exists any possible license which could be both an adapter's license for work A and for work B.

If so, that means your remix can combine those works and use that common adapter's license.

If not, there is no consistent way to put a single valid license on the combined remix, so it is not a valid combination.

[If you are not confident in your work and cannot find me to have a conversation about it, there is a filled-in chart in the CC FAQ.]

Unit 4 Break ... and Assignment ... Really?

Take a short break.

We're probably all too tired for assignments at this point, but how about

- Look up and describe to the class the famous "smoothie *vs* TV dinner" metaphor of Nate Angell's for remixes and collections. Why do you think I don't like the metaphor very much?
- It does bear some hard thought to look into those yellow boxes in the chart above, although that is quite technical.

Unit 5. Creative Commons for Educators/Librarians

The last unit of the CC Cert talks about practical issues for educators and librarians who want to use open [CC] licenses.

For both groups, the issues of **Open Access to scholarship** [OA] and **Open Educational Resources** [OER] are of interest, although perhaps in different measures.

We'll briefly talk about each of these topics, mentioning some definitions and providing some resources, but mainly concentrating on connections to CC licenses.

Let's start with OER.

5 Colorado's *legal* definition of OER

HB18-1331, **Higher Education Open Educational Resources**, passed by the Colorado General Assembly and signed by Governor Hickenlooper on 30 April 2018, defined OER here:

> (6) "OPEN EDUCATIONAL RESOURCES" MEANS HIGH-QUALITY TEACHING, LEARNING, AND RESEARCH RESOURCES THAT RESIDE IN THE PUBLIC DOMAIN OR HAVE BEEN RELEASED UNDER AN INTELLECTUAL PROPERTY LICENSE THAT PERMITS FREE USE OR REPURPOSING BY OTHERS AND MAY INCLUDE OTHER RESOURCES THAT ARE LEGALLY AVAILABLE AND AVAILABLE TO STUDENTS FOR FREE OR VERY LOW COST. OPEN EDUCATIONAL RESOURCES MAY INCLUDE FULL COURSES, COURSE MATERIALS, MODULES, TEXTBOOKS, FACULTY-CREATED CONTENT, STREAMING VIDEOS, EXAMS, SOFTWARE, AND OTHER TOOLS, MATERIALS, OR TECHNIQUES USED TO SUPPORT ACCESS TO KNOWLEDGE.[19]

[19] Closed based on the William and Flora Hewlett Foundation's definition: *"OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge."*

5 Everybody's *practical* definition of OER: the **5Rs**

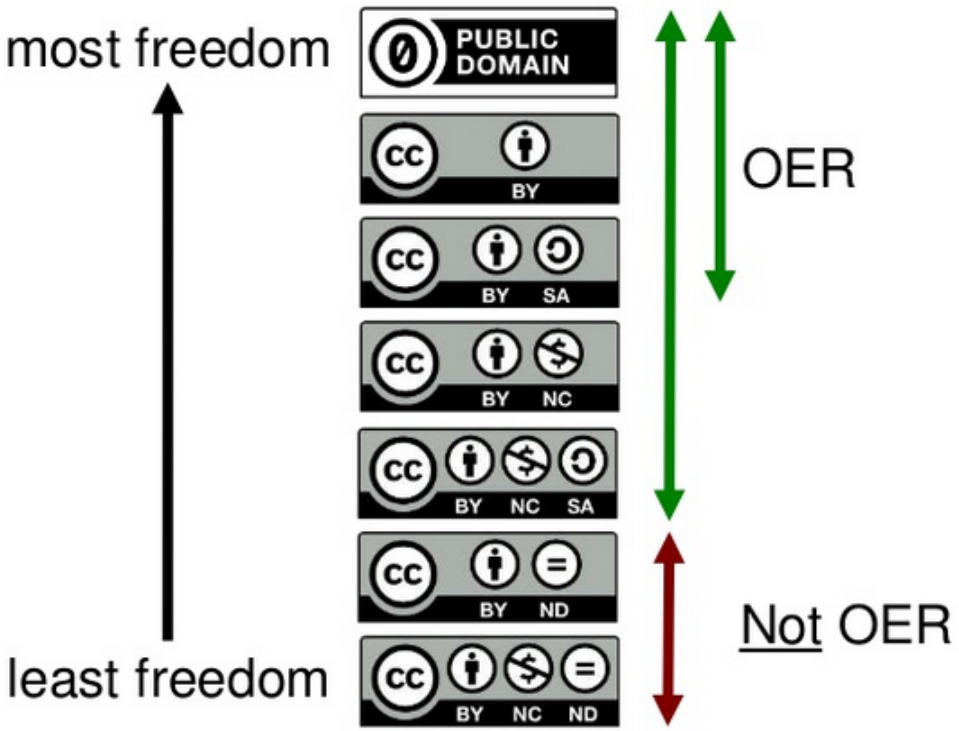
We've already mentioned[20] David Wiley's **5Rs**, but since they are the actual lived experience of most educators and librarians, it's worth fleshing out the details a bit more:

- **Retain** - to make, own, and control copies of the content
- **Reuse** - to use the content in a wide range of ways
- **Revise** - to adapt, adjust, modify, or alter the content itself
- **Remix** - to combine the original or revised content with other open content to create something new
- **Redistribute** - to share copies of the original content, your revisions, or your remixes with others

[20] Although, in addition to the reference cited before, see also The Access Compromise and the 5th R, by David Wiley, released under CC BY 4.0

5 Creative Commons licenses which support OER

Because of these 5Rs, or noting that FREE USE OR REPURPOSING in HB18-1331, we are left with only some of the possible Creative Commons licenses as being fully compatible with OER... although there is clearly room for some debate about exactly where the cut-off lies:



[From Open licenses by Alek Tarkowski, distributed under a CC-BY 4.0 license.]

5 Finding and evaluating ... mathematics

As a grad student working on my thesis, I spent a few months diving deeper and deeper into the mathematical literature. I was looking for just the perfect papers which proved exactly the right lemmata, with exactly the right hypotheses, which would help me take an important step for the main result of my thesis.

This was hard because the mathematical literature is spread across many journals, in many languages, distributed in many ways. There are some central databases and repositories (Mathematical Reviews, Zentralblatt MATH, arXiv.org, *etc,*), but it was not easy to find exactly what I wanted.

In the end, I found a few things I could use as is, and had to formulate and prove the rest of those necessary pieces. [I guess that's the point of doing thesis in mathematics: it would be silly if it were just plugging together a bunch of other people's work like Lego pieces....]

5 Finding and evaluating ... OER

In the same way, the perfect OER for some instructional situation can be hard to find. Again, there are some (many) central searchable databases and repositories, including, among **many** others

- OASIS
- OER Commons
- Merlot
- Creative Commons's OER page
- OpenStax
- The Open Textbook Library
- LibreTexts

Just as in my search for the perfect lemma, often there will not be a perfect OER, just one which is *pretty close*. But under CC licenses[21], these can be modified by the users to be entirely perfect.

And, just as in my lemma search, the best – only! – true authority on the quality and usefulness of each resource in the literature is the person who will use it: the instructor, for OER.

[21] without the ND clause

5 Building community

One of the most wonderful things about the Open Education movement is the wonderful, intersecting, supporting communities which contribute to it.

Here is just very small sample of ones you might like to join:

- CC Open Education Platform (invitation)
- International OER Advocacy
- Open Knowledge Open Edu
- Wikimedia Education
- SPARC: Library OER
- Open Textbook Network
- OER Forum
- OER Discuss
- Open Edu SIG
- US OER Advocacy
- OE Global

5 OER *vs* ZTC

One thing the community is somewhat divided on is whether the most important thing, particularly in the US with its insanely high textbook costs, about OER is their cost – typically, **$0**.

If cost were the primary driver in this movement, then we should probably be talking about "**Zero Textbook Cost** [**ZTC**] courses," rather than "courses which use OER."

This can be a particularly attractive perspective for funding entities such as legislatures, because they are often concentrated on the *return on investment* for their dollars spent, which is measured by total amount students save – *i.e.*, it only cares about cost.

In Colorado, for example, public institutions of higher ed are currently competing to meet the Governor's ZTC Challenge incentivizing a range of activity from ZTC degree pathways to *Z-Professors* who use only free textbooks in their classes.

5 Open Pedagogy, or OER-Enabled Pedagogy, or...

On the other hand, the pedagogical academic freedom which OER provides has lead to various approaches to pedagogy which are called *open pedagogy*, *OER-enable pedagogy*, *critical digital pedagogy*, *etc.* Some of the brilliant folks working in this area include Maha Bali, Robin DeRosa, Rajiv Jhangiani, Sean Michael Morris, and Jesse Stommel; see also The Open Pedagogy Notebook. *E.g.,* some of these authors talk about

disposable assignments: assignments that support an individual student's learning but add no other value to the world *and*

renewable assignments: assignments that both support individual student learning and add value to the broader world. With renewable assignments, learners are asked to create and openly license valuable artifacts that, in addition to supporting their own learning, will be useful to other learners both inside and outside the classroom.

[Although I confess I'm not sure I dislike "disposable assignments" as much as the name implies I should....]

5 Open Pedagogy's **5Rs**

Rajiv Jhangiani's blog post 5Rs for Open Pedagogy[22] gives a new set of **Rs** expressing the ideals that underpin his view of open pedagogy:

- **Respect** for the agency of students and creators including whether they wish to perform public scholarship or not
- **Reciprocate** by not just drawing on but also contributing back to the commons, by sharing resources, practices, and ideas
- **Risk** is ever present with open pedagogy
- **Reach** involves having an impact that extends well beyond the classroom, a course, or a semester objectives.
- **Resist** against forces that conspire to pit increasingly precarious faculty against increasingly precarious students. Resist against the commodification of learning. Resist against the neoliberal university.

[22] which he released under a Creative Commons Attribution-ShareAlike 4.0 International License

5 Open Access

A good definition of **Open Access** [**OA**] from the Budapest Open Access Initiative which says that OA means free...


[23]

> *"...availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of [research] articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution and the only role for copyright in this domain should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."*

OA is therefore enabled and controlled by various CC licenses.

[23] Open Access logo by PLoS made available under the Creative Commons CC0 1.0 Universal Public Domain Dedication

5 Green and Gold OA

It's useful in this context to know about the following terms, used widely in discussion of Open Access:

Green OA: making a version of the manuscript freely available in a repository. This is also known as self-archiving. An example of green OA is a university research repository.

Gold OA: making the final version of the manuscript freely available immediately upon publication by the publisher, typically by publishing in an Open Access journal and making the article available under an open license. Typically, Open Access journals charge an Article Processing Charge (APC) when an author wishes to (a) publish an article online allowing for free public access and (b) retain the copyright to the article. APCs range from $0 to several thousand dollars per article.

Activity 5.1: What can you do NOW with CC licenses?

Take three minutes to think and/or collaborate on the following:

In order immediately to foster open education at your institution with the help of Creative Commons licensing:

What can **you** do?

What can you help your colleagues do?

What can you help your students do?

Write a list of at least five specific actions you can take right away!

Discussion 5.1: Some ideas for action

- Educate yourself, your students, your colleagues....
- CC-license all of your work, and use full attribution of others' CC-licensed works.
- Share CC licensed material in editable form.
- Be aware of digital red-lining when using CC.
- Work to recognize OER in promotion and tenure at your institution.
- Work to make CC licenses the default on all documents produced by your institution/organization which otherwise would have all-rights-reserved copyrights.
- Help your institution fight exploitative deals with journal publishers.
- Boycott *required payment*[24] textbook schemes.
- *etc.*, *etc.*, *etc.*

[24] absurdly called "inclusive access" by commercial publishers

Resources

Creative Commons:

- main site: creativecommons.org
- FAQ: creativecommons.org/faq
- license chooser: creativecommons.org/choose
- marking your work with a CC license: on the CC wiki here.
- information on the fantastic[25] on-line course leading to a *Certificate of Mastery in Open Licensing*: certificates.creativecommons.org

Misc:

- the Open Attribution Builder from another state (Open Washington)
- my own Copyright Cheat Sheet for University Faculty
- my own Creative Commons Cheat Sheet for University Faculty

[25] But I'm biased: I've taken the course, become a *Master*, and now instruct it – sign up and maybe you'll be in my section!

Unit 5 Assignment ... Come on...

We're pretty much at the end, if we take a break we might not come back.

Instead, let's just jump to...

∞ Questions, Comments, and Contact Info

Questions? Comments?

Email (feel free!): jonathan@poritz.net ; Tweety-bird: @poritzj .

Get these slides at poritz.net/j/share/CCLWS4CCD.pdf and all files for remixing[26] at poritz.net/j/share/CCLWS4CCD/ .

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or poritz.net/j [then click **Always SHARE**]
or scan ⟶ [then click **Always SHARE**]



Also, tons of useful stuff at the OER site of the Colorado Department of Higher Education masterplan.highered.colorado.gov/oer-in-colorado/ .

[26] subject to CC-BY-SA